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ABSTRACT

Seven papers from a 1978 conference focus on the use of punishment in special education programs for emotionally disturbed students. In "The Legal Status of the Use of Corporal Punishment and Other Aversive Procedures in Schools," F. Wood and K. Lakin review laws, regulations, and court decisions that bear on the legality of the use of corporal punishment and aversive procedures with children and youth. A shorter paper by Wood considers "The Influence of Public Opinion and Social Custom on the Use of Corporal Punishment in Schools." Research on the applications of aversive procedures are presented in two subsequent papers--"Theory and Research on the Use of Aversive Procedures in the Education of Moderately Behaviorally Disordered and Emotionally Disturbed Children and Youth" (R. Rutherford) and "Research Findings Regarding the Use of Punishment Procedures with Severely Behaviorally Disordered Children" (R. Neel). S. Forness considers "Developmental Programming for the Use of Aversive Procedures in a Hospital School." In "Punishment and Educational Programs for Behaviorally Disordered and Emotionally Disturbed Children and Youth--A Personal Perspective," F. Hewett reviews the use of punishment and discusses a number of deterrents and alternatives to punishment in classrooms. A final paper by F. Wood is titled "Punishment and Special Education--Some Concluding Comments." (SB)

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PUNISHMENT AND AVERSIVE STIMULATION IN SPECIAL EDUCATION:

Legal, theoretical and practical issues in their use with emotionally disturbed children and youth

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PUNISHMENT AND AVERSIVE STIMULATION IN SPECIAL EDUCATION:

Legal, theoretical and practical issues in their use with emotionally disturbed children and youth

Frank H. Wood and
K. Charlie Lakin, Editors

A publication of the Advanced Institute for Trainers of Teachers for Seriously Emotionally Disturbed Children and Youth, Department of Psychoeducational Studies, University of Minnesota, under a grant from the Division of Personnel Preparation, Bureau of Education for the Handicapped, United States Office of Education, Department of Health, Education and Welfare.

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Minneapolis, Minnesota 1978

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The Advanced Institute has as its purpose to provide information to trainers of teachers for seriously emotionally disturbed children and youth on important topics in this field through conferences, internships and publications. It is committed to a policy of equal access to its programs and publications without regard to race, creed, color, sex, or national origin.

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Preface

The Advanced Institute for Trainers of Teachers for Seriously Emotionally Disturbed Children and Youth was developed through a grant from the Bureau of Education for the Handicapped to keep those responsible for training teachers for emotionally disturbed children abreast of current information on important topics in the field. As part of this task in the spring of 1977 over five hundred teacher trainers were asked to indicate those topics or issues which they considered of current importance. A sizable number of those surveyed replied that the use of punishing procedures was an issue needing review. It was in response to this perceived need that the topical conference reported in this volume was organized.

The papers contained in this volume represent a look at the use of punishment in special education from several vantage points. Their authors review the use of punishment and other aversive procedures from legal, cultural, theoretical and practical perspectives in an attempt to present the complexities of this controversial issue.

The initial drafts of these papers were presented and discussed at a conference held in Palm Springs, California, on March 16-17, 1978. The authors of the papers want to thank those who attended the conference and participated in the discussion for their contributions to the final shaping of the papers.

Special thanks must be given to Julie Lockway who has cheerfully typed and retyped manuscripts decorated with multi-colored squiggles of obscure meaning. All of us are also grateful to Dr. Herman Saettler and Dr. Gweneth Blacklock-Brown of the Division of Personnel Preparation, Bureau of Education for the Handicapped (USOE), for their encouragement and assistance to the staff of the Advanced Training Institute in its efforts to disseminate materials that will contribute to improved quality of education for students with serious emotional disturbance and behavioral disorders.

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Introduction

The Advanced Institute for Trainers of Teachers for Seriously Emotionally Disturbed Children and Youth was developed to assist teacher trainers to keep current on important topics in our field. Previous conferences and related publications have disseminated information about socialization strategies, including those developed for children with autistic traits, field-based teacher training programs and programs serving secondary level students.

This group of papers focuses in on a more specific topic than earlier publications, but one that goes to the heart of special education. Special educators intervene to assist others to change their behavior or at times to change their students' behavior without their assistance. But, as William Rhodes and his co-authors have pointed out in a series of books and papers, when viewed from a more tolerant perspective, some of our "therapeutic" interventions appear to be ethically questionable attacks on the socially harmless variant behavior of our fellows. An uncertainty about our right to intervene in the individual case, which Rhodes suggests we must always be courageous enough to face, logically places some constraints on the nature and intensity of our interventions. The issue becomes most acute when the procedures used will cause physical or psychological pain.

The authors of these papers have not attempted to provide a general answer to the philosophical and moral issues raised by Rhodes. As special educators, we are committed to intervening to change the behavior of emotionally disturbed children and youth with the goal of helping them to lead fuller, freer lives as well as reducing the reciprocal disturbance that characterizes their social relationships. We know that as they change, we and those around them also change, and the goals we have for them have a profound influence on what we also become. Means cannot be separated from these goals, and we have all individually faced the question of whether or not punishing procedures can serve as a means to attain a positive goal. We have sought greater understanding through the study of many aspects of the issue and tested our tentative answers in field situations. It is this knowledge and experience that we attempt to share in the hope it will help others think through their own position on a difficult issue.

The papers were planned as a set each highlighting a different facet of the topic. Wood and Lakin undertook a review of laws, regulations and court decisions that bear on the legality of the use of corporal punishment and aversive procedures with children and youth. While so doing, they were sensitized to the vaguely defined social and cultural factors underlying public attitudes in this area. This led to the separate, shorter paper on this theme. Rutherford and Neel were already engaged in surveying the research literature on the topic when contacted about the conference. They suggested that such a review differentiate the descriptions of applications of aversive procedures to children and youth labeled as severely or profoundly handicapped from those considered only mildly or moderately handicapped, thus reflecting a distinction important in field decisions

about the use of such procedures. The resulting comprehensive reviews provide a sound basis for considering questions about the short and long range efficacy of punishing procedures. Since final decisions about the use of aversives are made by people, it seemed appropriate to round out the discussion with papers in which two experienced educators of seriously emotionally disturbed children and youth shared from their personal observations of its use in clinical settings. Forness and Hewett agreed to do these papers which focus on how the use of punishing procedures can be placed in the context of on-going special educational programs. Like the other authors, they do not take the decision on use or non-use away from the reader, but by citing examples and explaining the basis for their own decisions, they model the steps each educator must follow in planning for the needs of individual special students. In a final note, Wood summarizes some of the ideas shared at the conference and in the papers which are particularly salient for him.

An educator who uses punishing procedures seeks to pick up a hot iron and use it therapeutically, scarring neither himself nor the exceptional child in the process. Given the risks and the moral issues created, some of us may prefer not to involve ourselves or to continue to seek positive alternatives. But, the evidence that punishing procedures are effective, quick, and need be no more painful than procedures such as surgery and prophylactic dental care, which we routinely accept as therapeutic, should make even absolute "no-sayers" less certain of their position.

Practice of the profession of special education requires us to make difficult decisions affecting students of whom our knowledge is always incomplete and inadequate. None are more difficult to make than those related to the use of punishing procedures. While not intending to make readers more comfortable about making these decisions, our hope is that they may be as fully informed as possible on this issue so that the students in whose education they share may benefit to the maximum.

Frank H. Wood, Director

Advanced Institute for Trainers of Teachers for
Seriously Emotionally Disturbed Children and Youth

The Legal Status of the Use of Corporal Punishment and Other Aversive Procedures in Schools

Frank H. Wood and K. Charlie Lakin
University of Minnesota

LEGAL STATUS OF CORPORAL PUNISHMENT IN OTHER COUNTRIES

Corporal punishment in schools has been banned in most European countries for some time. In Western Europe the first country to ban corporal punishment was Holland which did so in 1850. According to Newell (1972) and Hyman (1977), corporal punishment is now illegal in all Western European countries except Great Britain, Ireland and some parts of Switzerland and Germany. None of the Eastern European countries permit the use of corporal punishment in their schools today. The first of these countries to ban the practice was Poland which did so in 1783 (Newell, 1972). The position of the Soviet Union regarding the use of corporal punishment is contained in a statement by the Academy of Pedagogical Science:

> Corporal punishment is absolutely excluded from the Soviet system of training, since it creates in the child a tendency to blind imitation and to the discipline of the stick. Corporal punishment cannot raise the conscious awareness of the pupil and change his character for the better (Newell, 1972, p. 10).

Outside of Europe the use of corporal punishment is also forbidden by law in Israel and Japan. Interestingly, prominent among the countries which still retain corporal punishment are the former English colonies: Canada, Australia, New Zealand, South Africa and most parts of the United States (Newell, 1972).

Before proceeding further, it should be pointed out that the legal status of the use of corporal punishment cannot be taken as an absolute indication of its use or disuse in a country or state. When laws or regulations say that corporal punishment is not to be used in schools, one assumes that for the most part students will not be subjected to it. But exceptions undoubtedly occur. For example, a 1974 report by the Metropolitan Applied Research Center in New York City, where the use of corporal punishment is forbidden by school board regulation, documented its extensive and systematic use in one junior high school and reports of similar abuse in other schools. Conversely, one must be careful not to interpret the existence of laws explicitly or tacitly permitting corporal punishment to mean that corporal punishment is practiced in all schools governed by those laws. A recent survey of "approximately 100 school districts in Arizona" by the

Arizona Department of Education (1974) found that seven districts forbade the use of corporal punishment which is permitted by state law. Another survey of teachers in Ohio conducted by the Ohio Legislative Service Commission (1974) showed that 26% of teachers surveyed had *never* employed corporal punishment even though by law they were permitted to do so. In the four largest cities in the United States corporal punishment has been prohibited by the local boards of education even though all of these cities are in states where corporal punishment is permitted by state law and department of education regulations.

CONSTITUTIONAL LAW AND CORPORAL PUNISHMENT IN THE SCHOOLS: *The Ingraham Case*

While broad definitions of "corporal punishment" include the use of electric shock, the administration or injection of sickening drugs, and even imprisonment or isolation (Black, 1968), court cases involving its use in schools appear to have been limited to incidents where students were spanked or beaten. The relative severity or "reasonableness" of the punishment is at issue in some cases. In others, the focus is on the due process provided the punished student. In its recent decision in *Ingraham v. Wright* (1977), the United States Supreme Court addressed both these issues. A review of this case provides an understanding of the current constitutional status of corporal punishment.

Federal courts have often ruled that the use of corporal punishment with inmates of penal institutions is limited by the Eighth and Fourteenth Amendments (cf. *Jackson v. Bishop*, 1968; *Nelson v. Heyne*, 1974). Opponents of the corporal punishment of school children by teachers and administrators have on several occasions brought forward cases intended to challenge the Court to extend this prohibition into the schools. Recently, public discussion of this issue has focused on the implications of the Supreme Court's decision in *Ingraham v. Wright* released in April 1977. The case attracted special attention because the severity of the punishments inflicted was well beyond what many commentators considered reasonable.

The following description of the punishments inflicted on the two plaintiffs, James Ingraham and Roosevelt Andrews, students at Drew Junior High School, Dade County, Florida, was quoted directly from the District Court opinion by Justice Powell in his opinion for the majority.

> Because he was slow to respond to his teacher's instructions, Ingraham was subjected to more than 20 licks with a paddle while being held over a table in the principal's office. The paddling was so severe that he suffered a hematoma requiring medical attention and keeping him out of school for 11 days. Andrews was paddled several times for minor infractions. On two occasions he was struck on his arms, once depriving him of the full use of his arm for a week (p.657).

While the five justice majority recognized the severity of these punishments, they held they did not violate the students' constitutional rights as charged in the plaintiffs' petition.

Justice White, speaking for the four justices who made up the minority,

wrote a strong dissent in which he charged that denying school children constitutional protection exposed them to serious abuse. He argued that "If it is constitutionally impermissible to cut off someone's ear for the commission of murder, it must be unconstitutional to cut off a child's ear for being late to class. Although there were no ears cut off in this case, the record reveals beatings so severe that if they were inflicted on a hardened criminal for the commission of a serious crime, they might not pass constitutional muster" (pp. 684-685).

Justice Powell and the majority characterized this statement, with its implication that the denial of constitutional protection left school children open to abusive treatment, as "rhetoric" (p. 671). Where did the majority believe the protection of children against unreasonable corporal punishment is found if not in the Constitution? A closer examination of the majority opinion will clarify their view.

First, the majority firmly rejected arguments that the Eighth Amendment's protection against "cruel and unusual punishments" applied to the corporal punishment of school children, declaring that history and precedent limit its application to criminals. They argued that the protection of children lies in the nature of the local public school as an institution.

> The openness of the public school and its supervision by the community afford significant safeguards against the kinds of abuse from which the Eighth Amendment protects the prisoner. In virtually every community where corporal punishment is permitted in the schools, these safeguards are reinforced by the legal constraints of the common law. Public school teachers and administrators are privileged at common law to inflict only such corporal punishment as is reasonably necessary for the proper education and discipline of the child; any punishment going beyond the privilege may result in both civil and criminal liability . . . . As long as the schools are open to public scrutiny, there is no reason to believe that the common law constraints will not effectively remedy and deter excesses such as those alleged in this case" (p. 670).

Since some of the public reaction to the decision seemed to criticize the majority for not prohibiting entirely the use of corporal punishment in schools, it is important to note that not even the minority opinion took that position. The differences between the justices related to whether or not the *constitutional rights* of school children are violated by admittedly severe corporal punishment administered with little more than token due process. Thus, while asserting that Ingraham and Andrews' Eighth Amendment rights had been violated by the severity of the beatings they received, Justice White noted "There is little reason to fear that if the Eighth Amendment is held to apply *at all* to corporal punishment of school children, *all* paddlings, however moderate, would be prohibited . . . . It can hardly be said that the use of moderate paddlings in the discipline of children is inconsistent with the country's evolving standards of decency" (Emphasis from source cited, pp. 684-685). It is also worth noting that in *Baker v. Owen* (1975) the Supreme Court let stand a lower court ruling that North Carolina school authorities had the right to use corporal punishment on a sixth grade boy despite his mother's written note forbidding them to do so. Thus, the present court seems unanimous in supporting the right of

school authorities to use moderate corporal punishment in disciplining children.

The second part of the Ingraham decision discussed the due process issue. In the Baker case just cited, the District Court had specified minimal due process prior to the administering of corporal punishment. Since these minimal conditions had not been met in Ingraham, many legal commentators anticipated that the Supreme Court would find the defendants deficient. However, the majority argued that the authorization of reasonable corporal punishment by the common law overrides any Fourteenth Amendment right to formal due process prior to its infliction. Justice Powell again stressed the majority's view that protection is inherent in "the openness of the school environment" (p. 677). School authorities' awareness of common law penalties for excessive punishment will temper the application of it. Formal advance procedural safeguards are rejected as too costly to justify the "limited" additional protection that might result. The minority again took strong exception to this position, noting in Justice White's opinion that in its decision in *Goss v. Lopez* (1975) the Court had required substantially greater advance safeguards before the school exercised its right to suspend a student. White commented that the majority "somehow concludes that this risk (of wrongful punishment) is adequately reduced by a damage remedy that never has been recognized by a Florida court, that leaves unprotected the innocent student punished by mistake, and that allows the State to punish first and hear the student's version of events later" (p. 700).

If one were to project the possibilities of change in the constitutional status of corporal punishment in schools from the pattern of the Ingraham opinion, one would predict that in the near future constitutional protection from severe punishment and the requirement of additional advance procedural safeguards are more likely to be granted than any blanket prohibition of the use of corporal punishment on constitutional grounds.

CORPORAL PUNISHMENT UNDER COMMON LAW

The American courts have consistently ruled that the teacher has the basic right to punish students for noncriminal misbehavior. This authority is derived from the common-law doctrine of "in loco parentis" cited by Justice Powell. This doctrine, as outlined in Blackstone's Commentaries (1884, p. 543), states:

> A parent may delegate part of his parental authority, during his life, to the tutor or schoolmaster of his child; who is then *in loco parentis*, and has such a portion of the power of the parent, viz. that of restraint and correction, as may be necessary to answer the purposes for which he is employed.

Doernberg and Warren quote a typical court citation of this doctrine from an 1893 decision:

> It is clear that a father has the right to inflict reasonable personal chastisement on his son. It is equally the law, and it is in accordance with very ancient practice, that he may delegate the right to the schoolmaster, such a right has always commended itself to the common sense of mankind. It is clear that the relation of master and pupil carries with it the right of reasonable corporal chastisement (1974, p. 118).

Changes in society are reflected by changes in court interpretation of the law, but this basic view of the legality of corporal punishment continues to the present day in most court decisions where constitutional issues have not been raised. In those cases where corporal punishment is viewed as an attempt to maintain discipline in a school setting, courts have uniformly seen the teacher as performing the "purposes for which he was employed." These rulings are typified by the Louisiana Court of Appeals ruling in *Roy v. Continental Insurance Company* in 1975. Louisiana statutes did not specifically authorize corporal punishment at the time of the Ray decision, but a strong implication and legal precedent of authorization were there. (Since 1976 Louisiana teachers have been specifically authorized the use of reasonable corporal punishment.) The court decision in Roy includes the following comments:

> The use of corporal punishment or discipline by teachers apparently stems from the age old principle that a schoolmaster is regarded as standing "in loco parentis" or in the shoes of a parent while the child is attending school, and as a result shares the right to demand and obtain obedience from the student. Thus parental authority has been deemed to be delegated to the teacher. Insofar as the type or form of discipline is concerned, it must be conceded that parents have the right to inflict corporal punishment upon their children, subject of course to the limitation of jeopardizing the health and safety of the child. This court is of the opinion that teachers likewise have this limited right. Without doubt, some children of school age are immature, undisciplined, rebellious, and have a self-serving inability to recognize the necessity for regulation. As a result disruptive conduct often occurs. A teacher has the duty of maintaining discipline and good order in our schools, in addition to being responsible for the progress, conduct, and education of our children. In order for these educators to discharge this duty and maintain orderly conduct of activities in the classroom and on school grounds, we opine they must be given means of enforcing prompt discipline, one such means being reasonable corporal punishment (p. 353-354).

Most court cases focus on the "reasonableness" of particular instances of corporal punishment. It is not uncommon in such cases for the court to rule in favor of the punished student. At least after the fact, the "common-law remedy" cited by Powell has brought some relief to those unfairly or unreasonably punished. Knowledge of these decisions undoubtedly acts as a deterrent to abusive use of corporal punishment by other school officials. While not denying the right of the teacher to use reasonable corporal punishment in the discharge of educational duties, the courts have been placing limits on the teacher's *in loco parentis* authority. The decisions have limited the teacher's authority in two ways. One set of decisions has defined more narrowly the scope of the teacher's educational authority, limiting the right to interfere with nondisruptive expression of political opinion and personal style in dress and grooming. The landmark case in establishing freedom of political opinion was *Tinker v. Des Moines Independent Community School District* (1969). Considerable regional variation continues to exist in court rulings on the school's right to require

specific styles of clothing and hair length, an area where the Supreme Court has consistently refused to review lower court decisions, apparently regarding the issue as too "trivial" to warrant attention.

Besides defining somewhat more narrowly the teacher's authority as educator, court decisions have required of teachers more attention to formal due process than is required of parents. These decisions flow to some extent from the recognition in *Tinker* that students do have certain fundamental rights that are "not left at the school house door." In *Goss v. Lopez* (1975), the Supreme Court held that the student's right to an education was great enough that school officials must follow a formal due process procedure before suspending a student from school.

One cannot predict the long range impact on the *in loco parentis* doctrine of decisions in cases currently before the courts in which the absolute right of parents themselves to authorize suspension of their children's fundamental rights are questioned. Attention is currently focused on *Parham v. JR and JL*, a case concerning the right of parents to admit (send) their children to mental institutions without formal due process. In January 1978, the Supreme Court announced that it was unable to reach a decision in this case (Plotkin, 1978) and has scheduled it for new hearings in the fall. Certainly any qualification of the absolute right of parents to the control of their children will have implications for the *in loco parentis* authority of teachers.

TESTS OF REASONABLENESS

As previously mentioned, most court cases concerned with the use of corporal punishment in schools revolve around the question of "reasonableness." Based on a review of those cases, Kallan (1971) lists four tests by which the issue of reasonableness typically has been decided in those cases where the inflictor of the punishment was charged with assault. Kallan's four tests and specific decisions which exemplify each follow:

(1) Was the rule being enforced reasonable?

The authority of school personnel is interpreted by the courts to be limited. Rules made and enforced by school authorities which pertain to activities away from the school and outside the hours when schools are in session have been seen generally by courts as unreasonable unless it can be shown that the rules have direct bearing on school activities. In *Jones v. Day* (1921), for example, the court held that punishment of a child for not abiding by a school rule which had forbidden attendance at social functions on any night other than Friday or Saturday was not reasonable because the school rule was not reasonable. But in *O'Rourke v. Walker* (1925) a Connecticut court ruled that corporal punishment administered to a pupil while away from school was reasonable since the pupil's actions had effects on the "morale and efficiency of the schools." In this case, the defendant assaulted two smaller children who were allegedly trespassing on his mother's property. In recognizing the school's right to corporally punish the pupil, the court said that if the act is detrimental to the best interests of the school, it is punishable.

(2) Was the form and extent of the force reasonable in light of the type of offense committed by the pupil?

Courts have ruled that in part the measure of excessive, and, therefore, unreasonable force must result from a comparison of the offense with the resulting punishment. In *Johnson v. Horace Mann Mutual Insurance Co.* (1970), a Louisiana court ruled that a physical education teacher's public beating of a student with a stick, causing "multiple bruises on the body" was excessive given the teacher's explanation that the child had not obeyed his instructions.

The case of *Gardner v. The State* (1853) is another instance of this test of reasonableness. From the court opinion we learn that "Gardner was a school-teacher, and the party assaulted, his pupil. While they stood in such relations to each other, a controversy arose between them about the spelling of the word 'commerce.' The pupil, Stuart, having missed in spelling the word, and refused to try again, Gardner became angry and commenced beating him. He wore out two whips on him . . . . The cause was submitted to jury, verdict guilty, fine 2 dollars" (p. 633).

(3) Was the form and extent of the force reasonable in light of the pupil's age and known physical condition?

Courts have generally ruled that punishments are unreasonable when they are excessive given a child's age and physical condition. In *Quinn v. Nolan* (1879), however, the court ruled that a punishment was unreasonable given a child's physical condition only if the teacher could reasonably be expected to be aware of abnormalities in the child's health.

In a 1944 case, *Calway v. Williamson*, a school principal was successfully sued for damages incurred as a result of his "excess of restraint." In this case a ten-year-old, eighty-nine pound boy offered resistance and verbal abuse to a 190 pound principal who was attempting to take the boy to his office, where the boy was to receive corporal punishment. As the boy's resistance grew, so did the principal's determination to control the boy. Finally both the boy and the principal ended up on the floor with principal kneeling on the boy's abdomen. The boy continued to struggle and as a result of the altercation received cuts and abrasions which subsequently became infected. In ruling in behalf of the boy, the court said the injuries to the boy resulted from his justified attempts to escape from the "crushing weight of the defendant."

(4) Did the teacher act without malice or personal ill will toward the pupil?

Since the authority of the teacher to inflict corporal punishment derives from his mandate to educate, punishments have also been found unreasonable when they are judged not to be administered to correct the child, but instead as a revenge for the distress he caused the teacher.

The case of *Serres v. South Santa Anita School Board* (1935) is an example of a case in which this test is relevant. After an "altercation" between a student and a teacher on a playground of the school "the defendant negligently commanded and required the plaintiff, who was a youth of slight build, to assume position to receive punishment by a blow on the buttocks . . . . The plaintiff being in such position, the defendant

withdrew some distance to give force and momentum to the blow, advanced rapidly and with the use of excessive and negligent force delivered with his open palm a violent blow upon the coccyx bone of the plaintiff, and by said blow broke the said coccyx bone" (p. 894). In this case, the District Court was asked to amend a lower court conviction of battery to one of negligence. The court, however, let stand the ruling saying that the injury caused to the child resulted from the appellant's "deliberate acts constituting battery" (p. 894). In this case the teacher's attempts to maximize the force of his blow to the child were not seen as an attempt to correct the child. Instead the court saw the teacher's action as a deliberate attempt to hurt the child in an act of revenge resulting from their "altercation."

In examining court cases according to Kallan's four tests, it is clear that few cases could be judged solely on the basis of a single test. In looking at these and other cases, it is also evident that a number of other factors are influential in whether a teacher is likely to be convicted of assault as a result of a corporal punishment. For example, a large number of cases mention an actual physical injury done to a child. In another group of cases, the instrument or type of blow (whips, fists, rubber hoses) appear to be influential in the decision.

In short, then, there are no universal rules concerning what constitutes excessive or unreasonable punishment. As Forman (1972) says about the common law in general: "Time and time again the court has put it to jury deliberation whether or not a party to the action acted as a reasonable man would have acted under given circumstances" (p. 53).

Although the Supreme Court has ruled that the Eighth and Fourteenth Amendments are not applicable to the physical punishment of school children and common law requirements of "reasonableness" defy specific definition, in the majority of states in this country corporal punishment is governed by formal statute. An analysis of the state laws and state board of education regulations applicable to the practice follows.

STATES FORBIDDING THE USE OF CORPORAL PUNISHMENT

Three states have statutes that prohibit the use of corporal punishment. The language of these three laws does vary, however, and it seems appropriate to look specifically at the wording of them.

New Jersey's law banning corporal punishment is the oldest, being on the books in one form or another for over one hundred years. Prior to 1964 the statute specified that:

> No person employed or engaged in a school or educational institution, whether public or private, shall inflict or cause to be inflicted, corporal punishment upon a pupil attending such a school or institution.

In a 1964 amendment the following language was added:

> . . . . but any such person may, within the scope of his employment, use and apply such amounts of force as is reasonable and necessary:
> (1) to quell a disturbance threatening physical injury to others;
> (2) to obtain possession of weapons and other dangerous objects upon the person or within the control of a pupil;

(3) for the purpose of self-defense; and
(4) for the protection of persons or property; and such acts, or any of them, shall not be construed to constitute corporal punishment within the meaning and intendment of this section (New Jersey Revised Statutes, 18A: 6-1).

The conditions under which reasonable and necessary force may be used according to the New Jersey amendment are extreme but occur in New Jersey schools. According to the Bayh committee hearings on violence in the schools (1976), vandalism in New Jersey amounted to over five million dollars in the 1973-1974 school year. So while banning corporal punishment, the New Jersey lawmakers have differentiated between it and physical restraint, authorizing teacher use of the latter. This pattern may become more common in future legislation.

For example, the Maine statute of 1976, which is the latest legislation in this country prohibiting corporal punishment, is in substance much like that of New Jersey. It says:

> A teacher or other person entrusted with the care or supervision of a person for special or limited purposes is justified in using a reasonable degree of force against any such person who creates a disturbance when and to the extent that he reasonably believes it necessary to control the disturbing behavior or remove a person from the scene of such disturbance (Maine Revised Statutes Annotated, 17A:106-2).

According to the opinion of the Maine Attorney General, June 17, 1976: "Corporal touching is, therefore, justifiable although corporal punishing is not. Corporal punishment of a child may only be imposed by a parent or others who have similar 'long term general care and welfare responsibilities' towards the child . . . . the teacher who inflicts corporal punishment . . . . may no longer assert as a defense . . . the 'in loco parentis' relationship between himself and the student."

The Maine statute, then, like that of New Jersey does not allow corporal punishment but recognizes that teachers are called upon at times to use force in controlling students. An interesting feature of this legislation is its qualification of the notion of "in loco parentis" as a doctrine. The right to physically punish a child in Maine stems from the responsibility "for long term care and welfare" although another person, when he is "expressly delegated permission" (by the parent) "to prevent or punish misconduct . . . . is justified in using a reasonable degree of force." (Maine Revised Statutes Annotated, 17A:106-1). If or when parents request that their children receive corporal punishment for misconduct in school, this law will be tested as to whether it is a complete ban on corporal punishment in Maine schools.

The only other state that has passed a statute clearly forbidding the use of corporal punishment is Massachusetts. The wording of the statute is simple and direct: "The power of the school committee or any teacher to maintain discipline upon school property shall not include the right to inflict corporal punishment" (Annotated Law of Massachusetts, 71:376).

LAWS AND RULES GOVERNING CORPORAL PUNISHMENT IN OTHER STATES

In two states, Maryland and Hawaii, and in the District of Columbia, corporal punishment has been banned by the state boards of education. The situation in these jurisdictions is instructive as to the complexities of the corporal punishment issue.

The District of Columbia has no statute which specifically or by implication addresses the issue of corporal punishment in the schools. However, in May, 1959 the Board of Education of Washington, D.C. issued a rule which said: "Corporal punishment is expressly forbidden in District of Columbia schools." This rule of the Board remains in force today.

The history of a similar Maryland State Board of Education regulation forbidding the use of corporal punishment is instructive of the volatility of the corporal punishment issue. In Maryland the Board ban brought a strong reaction from the public. That reaction led to the passage of a 1971 law which stated:

> Irrespective of any bylaw, rule or regulation made or approved by the State Board of Education, nothing shall prohibit the use of corporal punishment by a principal or vice-principal in the county school system of . . . . (19 of Maryland's 23 counties are named). The board of education of each of the herein named counties may establish rules and regulations governing the use of corporal punishment in their respective county school system (Maryland State Law, 77:98B).

The State Board of Education ban, then, is still in effect in four counties and the city of Baltimore. These areas, because of their proximity to Baltimore and Washington, have a very significant proportion of the state's school age population, however. In the rest of the state the use of corporal punishment is a local issue.

The situation in Hawaii is as complex as that in Maryland but is quite different. Prior to 1975 Hawaii had a statute which expressly permitted corporal punishment In 1975 the legislature of the State passed a law (Hawaii Revised Statutes, 18:298-16) which read:

> No physical punishment of any kind may be inflicted upon any pupil, but reasonable force may be used by a teacher in order to restrain a pupil in attendance at school from hurting himself or any other person or property and reasonable force may be used as deferred in section 703-309(2) by a principal or his agent only with another teacher present and out of the presence of any other student, but only for the purposes outlined in section 703-309(2) (a).

Title 37, Section 703-309 of the Hawaii Revised Laws deals with justifiable force and specifically allows its application when

> The actor is a teacher . . . . (who) . . . . believes that the special purpose, including maintenance of reasonable discipline in school, class, or other group . . . . (when) the use of such force is consistent with the welfare of the minor.

Because of the ambiguity and apparent contradiction between the first clause of this law and that which follows, the Superintendent of Education

of Hawaii placed a ban on the use of corporal punishment. That ban remains in effect as of February 1978.

In three states, California, Pennsylvania, and Illinois, corporal punishment is permitted with recognition of a parent's right to determine whether it will be administered to their child. In these three states the legal and procedural nature of that parental input is somewhat different.

In California a 1976 statute requires that corporal punishment "not be administered to a pupil without the prior written approval of the pupil's parent or guardian" (California Education Code, 1:10854). This present law in California is an amendment of a 1974 law which prohibited corporal punishment of educationally, physically or mentally handicapped students without prior written parental consent. In widening its requirement of parental approval for corporal punishment to all students, California recognizes a parental responsibility over the discipline of children that goes beyond that recognized by the Supreme Court in *Baker v. Owens* (1975). In that case the court ruled that schools had the right to inflict moderate punishment despite parental objections.

The Pennsylvania State Board of Education has also recognized parents' authority over the use of corporal punishment on their children in school. The Pennsylvania Code (22:12.5) states that: "Where corporal punishment is authorized, school authorities shall notify parents of this policy. Corporal punishment may not be administered to a child whose parents have notified school authorities that such disciplinary method is prohibited." The regulation in Pennsylvania differs from that in California in two ways. First California recognizes parental opinion in the use of corporal punishment in statutory law. In Pennsylvania parental option is required by Board of Education regulations. Second California law requires prior approval before punishing while in Pennsylvania punishment may be inflicted unless parents object.

As is the case in Pennsylvania, in Illinois the right of parents to determine whether corporal punishment may be inflicted on their child is recognized through regulation issued by the Superintendent of Public Instruction (1974). That regulation states: "If corporal punishment is to be used by school districts as a penalty for misbehavior, the district shall notify parents upon initial enrollment of the student that they may submit a written request that corporal punishment not be administered to their child or children."

North Carolina and Nevada are the only states in which corporal punishment is approved on the state level with local districts having no option as to its use in their schools. The North Carolina law authorizes both certificated and non-certificated teachers and aides to "use reasonable force . . . to restrain or correct pupils and maintain order." The statute goes on to say that: "No county or city board of education or district committee shall promulgate or continue in effect a rule, regulation or bylaw which prohibits the use of such force as specified in this section" (General Statutes of North Carolina, 115:146). The Nevada statute requires that "the board of trustees of every school District shall adopt rules and regulations authorizing teachers, principals and other certificated personnel to administer reasonable corporal or other punishment to pupils

when such action is deemed an appropriate corrective measure" (Nevada Revised Statutes/School Law, 392.470). Unlike the North Carolina law, the Nevada statute places a number of restrictions on the school personnel administering the punishment including that corporal punishment is used, "only after all other methods of discipline have proved ineffective." While the laws of Nevada and North Carolina may seem to be restrictive on local district option, from the standpoint of the individual teacher, these laws are the nation's least restrictive in that they appoint the teacher as the person responsible for determining how a child should be punished.

Fourteen states presently have laws which authorize teachers to inflict corporal punishment, but recognize the local board as having the ultimate responsibility for making policy regarding corporal punishment in its district (see Table 1).

Arkansas' Act 904, "An Act to Provide for Disciplining Children in Schools," is the most recent of this type of legislation (Arkansas General Assembly, 1977). It states in Section 2:

> Every teacher is authorized to hold every pupil strictly accountable for any disorderly conduct in school or on the playground of the school, or on any school bus going to or returning from school, or during recess. Any teacher or school principal may use corporal punishment in a reasonable manner against any pupil for good cause in order to maintain discipline and order within the public schools . . . Each local school board shall adopt such rules and regulations as it deems necessary to implement and control any form of corporal punishment in the schools in its district.

While the language of this act is not clear as to whether districts are required to implement policies specifically authorizing corporal punishment, the intent of the law, as reported to the authors is simply to recognize formally the local district's right to implement such policies if it chooses to do so. Beyond this, however, the Arkansas statute requires that those districts which opt to permit corporal punishment adopt rules and regulations governing its application.

Florida's law authorizing corporal punishment is similar to that of Arkansas in that it makes corporal punishment lawful, and recognizes local board autonomy in approving its use in the local district. Florida law states:

> Subject to law and to the rules of the district school board, each teacher or other member of the staff of any school shall have authority for the control or discipline of students . . . ."

The Florida law then goes on to authorize corporal punishment specifically. However, unlike the Arkansas law which required the local board of education to develop rules to regulate the administration of corporal punishment, Florida provides rules within its law. It requires that

> . . . . If a teacher feels that corporal punishment is necessary, at least the following procedures shall be followed:
>
> (1) The use of corporal punishment shall be approved in principle by the principal before it is used . . . .
>
> (2) A teacher or principal may administer corporal punishment only in the presence of another adult who is informed beforehand, and in the student's presence, of the reason for the punishment.

(3) A teacher or principal who has administered punishment shall, upon request, provide the pupil's parent or guardian with a written explanation of the reason for the punishment and the name of the other adult who was present (Florida Statutes, 15:232.27).

The *South Carolina School Code* on the other hand simply states: "The governing body of each school district may provide corporal punishment for any pupil that it deems just and proper" (Code of Laws of South Carolina, 59:63-260). Other statutes are similar authorizing corporal punishment "where so authorized, upon the adoption of written policies, by an area, county or independent board of education" (Georgia Code Annotated, 32:836) or "subject to such rules [of the board of trustees]" (Wyoming Statutes, 21:4-308). While some of the laws authorize teachers to inflict reasonable corporal punishment and make no direct reference to local authority to regulate its use, local boards, as employers, are best considered the source of local policy except where they are directed by state legislation to make specific rules authorizing the use of corporal punishment.

Another type of statute which permits corporal punishment is that which makes the state's laws governing assault specifically non-applicable to teachers inflicting "reasonable" corporal punishment. Eleven states have such laws (see Table 1). These laws have their origin in the concept of "in loco parentis" although the more recent of these laws have specifically distinguished between parent-child and educator-student relationships.

Colorado's statute is an example of a law authorizing the teacher to use corporal punishment under the concept of "in loco parentis." It says:

> The use of physical force upon another person which would otherwise constitute an offense is justifiable and not criminal under any of the following circumstances:
> (1) A parent, guardian or other person entrusted with the care and supervision of a minor or an incompetent person, and a teacher or other person entrusted with the care and supervision of a minor, may use reasonable and appropriate physical force upon the minor or incompetent person when and to the extent it is reasonably necessary and appropriate to maintain discipline or promote the welfare of the minor or incompetent person. (Colorado Annotated Statutes, Title 18:1-703(a)).

The Texas statute governing the use of corporal punishment is similar to that of New York, but differentiates between parents' right to use physical force and teachers' right to use physical force. In regard to "educators" it says:

> The use of force, but not deadly force, against a person is justified:
> (1) if the actor is entrusted with the care, supervision, or administration of the person for a special purpose; and
> (2) when and to the degree the actor reasonably believes the force is necessary to further the special purpose or to maintain discipline in a group (Texas Codes Annotated, 2:9.62).

Unlike the Colorado law, the Texas law limits the teacher's justified use of physical force to "the special purpose" for which he/she is employed.

A final broad category into which fifteen states can be placed is one in which state laws recognize the local school district's responsibility for

discipline of its pupils, but make no mention of corporal punishment. In these states the authorization of corporal punishment is a local issue with either the local school board or state education department providing guidelines for the application of corporal punishment. In this category teachers have an assumed right, a court recognized right or department of education guidelines authorizing corporal punishment.

The Code of Alabama, 1975, is illustrative of this type of legislation. It says:

> Any city, county or other local public school board may prescribe rules and regulations with respect to behavior and discipline of pupils enrolled in the schools under its jurisdiction . . . . (Code of Alabama, 16:1-14).

In Alabama policies regarding corporal punishment are made exclusively at the local level. Florence Abrams (personal communication, 1978) of the Alabama State Department of Education writes: "The local education agencies usually set policies for the punishment of students and the most widely accepted policy in Alabama is that a student can be spanked or paddled by the principal, or in the presence of the principal if the teacher administers the punishment."

Like Alabama, Alaska school law recognizes the local education agency as having responsibility for providing the means necessary to maintain discipline in its schools. Unlike the Alabama Department of Education, however, the Alaska Department of Education provides guidelines for the administration of corporal punishment in those districts which choose to approve it. In Alabama the right of teachers to inflict corporal punishment has been recognized through court decisions going back to 1889. Alaska has had no court cases regarding corporal punishment and the most easily recognized source of authority permitting teachers to spank children is the Department of Education guidelines governing corporal punishment. Similarly, Oregon, which has no law specifically mentioning corporal punishment and has no court precedent over the matter, has a Department of Education regulation which states: "School district boards shall prepare written rules of pupil conduct and discipline that shall include, but not necessarily be limited to, the following topics: . . . (h) physical discipline" (Oregon Administrative Rules, 581:21:050).

Utah is an example of a state in which the teacher derives whatever authority he/she has to inflict corporal punishment only from the rules of the local education agency. Utah law states that "every board of education . . . may . . . make and enforce all needful rules and regulations for the control and management of the public schools of the district." (Utah Code Annotated, 53:6-20). The assumed common law right of teachers to inflict corporal punishment "in loco parentis" has never been tested in a Utah court.

Table 1 outlines the type of laws governing corporal punishment in the individual states. Those interested in more specific information on the restrictions placed on the corporal punishment of students in each state are directed to Table 2. While this Table is as complete as the authors have been able to make it, it is limited to rules on the state level. Those interested in the policies governing corporal punishment in a specific school district should contact the Office of the Superintendent of that district.

Table 1
Types of Laws and Regulations Governing Corporal Punishment in the United States

Specifically forbidden by statute.	Not forbidden by law, but forbidden by state education agency.	Allowed specifically with local districts having no authority to forbid its use.	Allowed specifically with local districts given responsibility for approval and regulation.	Recognition of teacher or administrator responsibility for discipline. Assumed right, court recognized right, or state education agency guidelines permitting corporal punishment.	Recognized right through non-applicability of assault statutes to teachers or as justification of "reasonable force."	Allowed, but parental discretion recognized in law or state education agency rules.
Maine Massachusetts New Jersey	District of Columbia Maryland* Hawaii**	Nevada North Carolina	Arkansas Delaware Florida Georgia Idaho Louisiana Maryland* Michigan Montana Ohio South Carolina South Dakota Virginia Wyoming	Alabama Alaska Indiana Iowa Kansas Mississippi Missouri Nebraska New Hampshire New Mexico Oregon Rhode Island Tennessee Utah West Virginia	Arizona Colorado Connecticut Kentucky Minnesota New York North Dakota Oklahoma Texas Washington Wisconsin	California Illinois Pennsylvania

* Certain counties

**See discussion of Hawaii statute on page 16.

Table 2
Summary of State Laws and Regulations Governing Corporal Punishment

	Legality				Limitations (including state guidelines)															Permitted to Punish				Justifications for Punishing						Guidelines	
	Prohibited	Permitted	Silent-court acknowledged right	Silent-no court decisions	Prohibited by State Dept. of Educ.	Parental prohibition allowed	Parental notification required	Witness required	Without malice (calm)	Only certain body areas	Not in presence of peers	Child notified of reason	Instrument specified	With local approval	Binding on local district	Other methods tried first	Reasonable	Teacher	Principal	Any certified person	Others	To maintain discipline	Restraint Control	Correction	Promote welfare	Disobedience	Punishment of misconduct	Disturbance	State Guidelines	Local guidelines required
ALABAMA			X											X																
ALASKA				X				X	X	X		X	X	X				X	X										X	
ARIZONA		X					X	X	X	X			X	X				X											X	X
ARKANSAS		X						X	X		X	X		X				X	X	X			X	X		X		X	X	
CALIFORNIA		X				X								X		X	X	X	X			X								X
COLORADO		X												X	X		X	X	X	X				X						
CONNECTICUT		X												X			X	X	X			X			X					
DELAWARE		X												X			X	X	X			X			X					
DISTRICT OF COLUMBIA				X	X									X				X	X											X
FLORIDA		X						X				X		X				X	X											
GEORGIA		X						X				X		X				X	X											
HAWAII	?	?			X									X		X	X	X	X			X	X				X	X		X
IDAHO		X																												
ILLINOIS		X				X								X			X					X	X							
INDIANA			X											X				X	X	X										
IOWA			X											X																
KANSAS			X											X				X											X	
KENTUCKY		X												X																
LOUISIANA		X												X				X				X			X					
MAINE	X													X			X	X	X			X	X					X		
MARYLAND*		X			X			X						X	X														X	
MASSACHUSETTS	X																		X										X	
MICHIGAN		X													X															
MINNESOTA		X												X				X	X			X								
MISSISSIPPI			X											X			X	X					X	X						
MISSOURI			X											X																

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	Legality				Limitations (including state guidelines)													Permitted to Punish					Justifications for Punishing							Guidelines	
	Prohibited	Permitted	Silent-court acknowledged right	Silent-no court decisions	Prohibited by State Dept. of Educ.	Parental prohibition allowed	Parental notification required	Witness required	Without malice (calm)	Only certain body areas	Not in presence of peers	Child notified of reason	Instrument specified	With local approval	Binding on local district	Other methods tried first	Reasonable	Teacher	Principal	Any certified person	Others	To maintain discipline	Restraint Control	Correction	Promote welfare	Disobedience	Punishment of misconduct	Disturbance	State Guidelines	Local guidelines required
MONTANA		X					X	X	X					X	X			X	X				X							
NEBRASKA			X											X																
NEVADA		X					X			X					X	X	X	X	X	X				X						X
NEW HAMPSHIRE			X											X																
NEW JERSEY	X														X															
NEW MEXICO				X										X	X															
NEW YORK		X												X	X		X	X				X			X					X
NORTH CAROLINA		X													X		X	X	X	X	X		X	X						
NORTH DAKOTA		X												X			X	X	X						X		X			
OHIO		X												X	X		X	X	X	X		X								
OKLAHOMA		X												X			X						X	X			X			
OREGON		X												X															X	X
PENNSYLVANIA		X				X			X					X			X											X		
RHODE ISLAND				X										X																
SOUTH CAROLINA		X						X				X		X																
SOUTH DAKOTA		X												X	X		X	X	X				X						X	
TENNESSEE			X											X																
TEXAS		X												X	X						X									
UTAH				X										X																
VERMONT		X						X						X	X		X	X	X			X	X	X						
VIRGINIA		X												X	X		X	X	X			X	X							
WASHINGTON		X						X		X	X	X		X	X		X	X	X				X					X		
WEST VIRGINIA				X				X						X			X	X	X			X							X	
WISCONSIN		X						X				X		X			X									X			X	
WYOMING		X												X			X	X	X						X		X			

*Situation varies by county

SOME TRENDS

Having outlined a number of categories of laws governing the use of corporal punishment in the United States, it is instructive to look at trends in these categories over the past ten years. While ten years is a relatively short period of time in which to view substantial changes in legislation governing specific practices, especially in the absense of court requirements, there has been considerable change in laws governing corporal punishment since 1967. In 1967 there was one state (New Jersey) in which corporal punishment had been banned by state law. Ten years later there were three. In 1967 there were no states in which the state education agency had forbidden corporal punishment. Ten years later there were two. In 1967 there were no states in which parents' rights to forbid the infliction of corporal punishment on their children were recognized. Ten years later there were three.

In addition to these changes in the last ten years, there has been a marked trend among states in the past twenty years to specify in legislation the relationship between the teacher and student regarding the use of physical force (see Table 3).

Table 3:
Number of States Specifically Designating the Rights of Teachers in Regard to the Use of Corporal Punishment*

	1957**	1967***	1977
Permitting	18	23	32
Prohibiting	1	1	3
Total	19	24	35

*Including states in which the rights of teachers to act *in loco parentis* are specified in legislation.

**Source: James, 1963.

***Source: Rovetta, 1968.

In 1957 eighteen states had statutes formally recognizing the right of teachers to inflict corporal punishment. By 1977 that number had grown to thirty-two. One might interpret such changes as providing reinforcement of the "in loco parentis" doctrine in that they put in formal statutes rights that teachers had under common law. However, the reality of school authority as defined by numerous cases in the last decade suggests that this would be a narrow interpretation of the significance of the shift from common to statutory law teacher authority.

Until relatively recently, American teachers have functioned under an expansive definition of the "in loco parentis" doctrine. From Blackstone's limitation that the teacher's authority under common-law permitted the use of "restraint and correction" for the "purposes for which he is employed," the authority of teachers evolved by the middle years of the 20th century to the point at which they could paddle a student for not wearing a belt in his blue jeans, or having hair which touched his collar, and so forth. There are many examples. What followed, in due time, was a series of court cases and much protest by both students and parents. At the heart of most

of these confrontations was the issue of children's rights, and parents' rights vs. teachers' rights under the doctrine of "in loco parentis." "In loco parentis" had been stretched to the point that some parents felt school personnel were able to mandate too many fundamental rules about the physical appearance and behavioral style of students and in some instances, were punishing corporally non-compliant students.

Court decisions handed down beginning in the '60's, have begun to reassert the rights of students and parents. Teachers' rights to govern some portion of their students' lives have been reaffirmed, while the end points of that authority have been more clearly defined. In recent years, many legislatures have felt the need to help define those end points. The definition that most authorities have arrived at is, almost ironically, close to the original common law definition outlined by Blackstone.

Thus, the powers of teachers are increasingly defined by law to be qualitatively different from those of parents and are specifically related to the teacher role. Primary among these are the right to use reasonable means to "restrain and correct" children within the school setting. And in that role, with the exception of six states, and as confirmed in the *Baker v. Owen* decision (1975), the teacher's right to use corporal punishment to restrain and correct is not limited by a parent's protests against such means.

Generally the new court decisions and laws explicitly spelling out the disciplinary rights of teachers shows two trends. The first is toward a more restrictive definition of "in loco parentis" that limits the teacher's right to act in place of the parent to "the purposes for which he is employed" (to quote Blackstone). Second, because of well-publicized concern about "the lack of discipline" in our nation's schools, several state legislatures have moved the disciplinary use of corporal punishment from a position of tacit acceptance to that of explicit statutory approval. Furthermore, even where corporal punishment has been prohibited, the use of physical restraint by teachers has been approved, as in New Jersey and Maine.

THE LEGAL STATUS OF SECLUSION, "AVERSIVE STIMULATION" AND OTHER PUNISHING PROCEDURES

Almost all the state laws which relate to discipline problems in the school deal either with corporal punishment or suspension/expulsion issues. As already mentioned, the definition of "corporal punishment" in all the court decisions and laws cited appears limited by intent or explicit language to paddling, spanking and whipping, even though some legal authorities include imprisonment, isolation, and the administering of noxious stimuli of other sorts in their definitions (Black's Law Dictionary). Very few states have legislation which specifically mentions the physical isolation of students or the use of aversive procedures such as electric shock or drugs. When such laws do exist, they make only a brief passing recognition of the teacher's right to isolate a student for the purpose of maintaining discipline. Alabama has such a law. It says:

> Any city, county or other local public school board may prescribe rules and regulations with respect to behavior and discipline of pupils enrolled in the schools under its jurisdiction and may at its discretion require the

grouping of pupils based on considerations of discipline and may remove, isolate, separate or group pupils who create disciplinary problems . . . ." (Code of Alabama, 1975, 16-1:14).

While there is a general lack of explicit statutory approval of the use of seclusion or time-out, in no state is this disciplinary technique explicitly forbidden in the public schools. However, in several states the department of education or its special education section has provided guidelines for the use of seclusion, and three states mentioned to the authors that they are presently in the process of formulating guidelines for the use of time-out procedures.

A review of recent court cases turned up none in which the central issue was a teacher's right to isolate a school child for reasons of discipline. The cases that have their origin in challenges of institutional (*Wyatt v. Stickney*, 1972) and penal (*Turman v. Morales*, 1974) practice of isolation have focused on periods of time exceeding by many hours the typical "school day" of six to eight hours.

Other papers presented at this conference deal with a number of non-physical and non-exclusionary punishing procedures which are at times used with school children. No court cases or laws have been located by the authors which speak to the legality of the use of most of the procedures discussed. It is, however, important for any educator to realize that imprudence in any instance of punishment can become cause for dismissal or legal sanction regardless of the general acceptance of the particular type of punishment used. A single exemplary case may illustrate this point.

Negative practice is a behavior modification technique in which a person exhibiting an undesirable behavior is required to perform that behavior many times. Theoretically negative practice may be effective in controlling undesired behavior for a number of reasons. Perhaps the most obvious of these is the aversiveness of a large number of repetitions of the same task. *Celistine v. Lafayette (La.) Parish School Board*(1973) is a court case which originated when a teacher utilized a "negative practice" technique to deal with the use of a "very vulgar word" by two eleven-year-old, fifth grade girls. The teacher, Celistine, having been told that two girls in his class had used a four-letter vulgarity meaning sexual intercourse, assigned the students the task of writing the word one thousand times. This assignment, once completed, was to be signed by the principal of the school and eventually the parents of the two girls.

The immediate reaction of the school officials to this assignment was to ask Celestine to resign or be fired. Celistine, a "permanent teacher", refused to resign and challenged his dismissal in court. In upholding the school's right to dismiss the teacher, a Louisiana court of appeals noted:

> It is true that neither the School Board nor the Superintendent had ever forbidden teachers from using the form of punishment used by the plaintiff. Celestine, however, was not dismissed because of the *form* or *method* (emphasis in decision) of disciplining students which he used. He was dismissed because of extremely poor judgment . . . . It was the bad judgment, or incompetency, of the teacher in requiring that a vulgar word be used which brought about his dismissal. It was not merely his selection of a form or method of punishment (*Celestine v. Lafayette Parish*, 1973, p.654).

As the court's judgment points out, regardless of the legal status of any method of punishment, teachers are at all times liable for scrutiny in regard to the "reasonableness" of their application of a punishing procedure. As Wood (1978) suggests, the prudent teacher recognizes the local, regional situational factors that condition the definition of "reasonable" punishments.

Wood (1978) has also discussed some concerns about too easily separating "seclusion" and "aversive stimulation" from "corporal punishment". This is not a distinction made solely by theoreticians. In a number of states there are now formal distinctions written into guidelines for the care of persons in facilities of state departments of mental health. Maine guidelines for the treatment of mentally retarded persons in the facilities of the State Department of Mental Health and Corrections say explicitly that "corporal punishment shall not be permitted". The next section of the guidelines says that "treatment programs involving the use of noxious or painful stimuli may only be employed to correct behavior more harmful to the client than the treatment program . . . ." (Maine Revised Statutes Annotated, 186-A:2142). Massachusetts, which like Maine prohibits corporal punishment in the public schools, provides guidelines for the use of "aversive and deprivation procedures" in facilities operated by the Department of Mental Health. Iowa, like Maine, explicitly prohibits "corporal punishment" in facilities operated by the Department of Social Services, but provides guidelines for the use of "aversive and deprivation procedures". Iowa guidelines, however, do require the permission of the patient or his parent or guardian. This requirement was prompted by a court case involving the administration of a vomit inducing drug as an "aversive stimulation" procedure at the Iowa Security Medical Facility (*Knecht v. Gillman*, 1973). In this case the court ruled that the administration of a drug to induce vomiting for the violation of a "behavior rule . . . . constitutes cruel and unusual punishment unless consent has been obtained from (the) inmate specifying (the) nature of the treatment, (the) purpose, (the) risk and effects and advising (the) inmate of his right to terminate consent at any time" (p. 1136).

In ruling on this case the court noted "that the mere characterization of an act as 'treatment' does not insulate it from eighth amendment scrutiny" (p. 1139). In elaborating on this the court quoted from *Vann v. Scott* (1972):

> Since the argument runs by definition that treatment is not "punishment", it obviously cannot be "cruel and unusual punishment." But neither the label which the State places on its own conduct, nor even the legitimacy of its motivation, can avoid the applicability of the Federal Constitution. We have no doubt that well intentioned attempts to rehabilitate a child could, in extreme circumstances, constitute cruel and unusual punishment prescribed by the Eighth Amendment (p.1139).

Both *Knecht* and *Vann* were rulings involving persons confined in state institutions. So while the application of physically painful consequences within the "open" environment of the public schools is not considered within the realm of Eighth Amendment protections, residents of institutions, not afforded these same protections due to the relatively "closed"

nature of those facilities, appear to remain protected from abusive punishments by constitutional restrictions against "cruel and unusual punishment." Employees of facilities under the overall administration of correctional or health and welfare agencies would be governed by these considerations and regulations prompted by them.

To the knowledge of the authors the distinction between "aversive stimulation" and corporal punishment has not been reviewed by courts or legislatures in states where "aversive stimulation" is permitted in institutions, while corporal punishment is banned by statute in the public schools.

EFFECTS OF THE DUE PROCESS PROVISIONS OF PUBLIC LAW 94-142

The recently enacted Education for All Handicapped Children Act (Public Law 94-142) includes due process provisions requiring written parental consent both to the educational goals set for their handicapped child by the school system providing service and to the nature of the "educational services" to be used to attain those goals (Harvey, 1978). Thus, it appears that regardless of state law or local regulations, parental approval would have to be obtained before a school district used corporal punishment in the form of spanking, paddling, seclusion or other aversive stimuli with special education students. Disputes over the proposed use of aversive procedures might result from their advocacy as the procedure of choice by either the parent or the school personnel. Irreconcilable differences would result in use of the formal appeals procedure specified by the law and might conceivably eventually reach the courts. Based on an analysis of *Ingraham v. Wright* (1977) and *Baker v. Owen* (1975), a reasonable prediction is that in such cases, the courts would tend to allow the schools all the latitude permitted by state and local statutes. Testing of this prediction must await the appearance of germane cases.

A SUMMARY COMMENT

The use of corporal punishment in schools is now explicitly sanctioned by law in more states than was the case 10 years ago. An exact definition of "corporal punishment" is not provided in most of these statutes, but it seems generally understood to refer to spanking and paddling with the hand, a paddle, or a stick. Where the statutes do not define the conditions under which corporal punishment may be used, the traditional common law definition of "reasonableness" is to be applied. The existence of guidelines regulating the use of aversive procedures such as electric shock and time-out or seclusion in the few states where "corporal punishment" is forbidden by law indicates that authorities in those states make a distinction in practice between these procedures and corporal punishment. The authors have not found a case where this distinction has been tested in the courts.

In recent decisions, the U.S. Supreme Court has denied the argument that constitutional rights to due process and protection against cruel and unusual punishments apply to students, even when they have been severely punished with minimal due process or the punishment is administered in

spite of the objections of parents, so long as such punishment is carried out in accordance with state or local laws.

Despite this general pattern which permits corporal punishment to continue to be used in some of our nation's schools, legal and regulatory steps to control its use are also occurring. A number of the new state laws limit the right of teachers to use corporal punishment to specifically defined situations, thus limiting the teachers' traditional exercise of their judgment under authority of the *in loco parentis* doctrine. Alarmed by the threat of possible civil or criminal suit, states and local school districts are adopting discipline codes which have a similar effect. Many of these codes specify due process procedures, including parental approval obtained in advance. Thus, the overall effect of the new laws and the *Ingraham* decision may be more to protect students from indiscriminate corporal punishment than to further expose them to its use.

The Supreme Court majority and minority decisions in the *Ingraham* case both cited majority public approval of the use of corporal punishment in schools in the course of their arguments. That approval appears to be becoming more qualified than in the past, and the major qualifications are beginning to be reflected in law, regulation, and court decisions. As four Justices of the Supreme Court noted in their decision in the *Trop* case involving a citizen's Eighth Amendment rights, the scope of constitutional protection is not static, but is determined by "the evolving standards of decency that mark the progress of a maturing society" (quoted by Merker, 1975, p. 1440). It remains to be seen whether the observed new restrictions on the use of corporal punishment by educators will eventually develop into a general prohibition of its use.

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The Influence of Public Opinion and Social Custom on the Use of Corporal Punishment in Schools

Frank H. Wood
University of Minnesota

The familiar folk saying, "Spare the rod and spoil the child," is often ascribed to the biblical King Solomon on the basis of passages in Proverbs such as 13:24, "He that spareth his rod hateth his son; but he that loveth him chasteneth him betimes" (AV). This ancient teaching that whipping or spanking is a desirable procedure for the rearing of good children is no longer generally accepted, although both parents and teachers often cite it to justify their use of corporal punishment, defined here as any procedure for inflicting pain upon the body of one person (the punished) by another person (the punisher). Today, the use of corporal punishment is defended chiefly as a "last resort" to control or change the behavior of a child who has not responded to other aversive procedures such as time-out or isolation, verbal reprimands, ignoring, or social ostracism. Corporal punishment continues to be used, even though in the abstract many adults find the inflicting of pain on another person, especially a child, repugnant. The dynamics that may explain its continued use could be discussed in detail, but for present purposes, it is adequate to suggest that corporal punishment continues to be used because "it works," that is to say, from the perspective of the punisher, the behavior of the punished often changes in ways that are gratifying.

Recognizing that the infliction of corporal punishment on children has this functional value for all of us and that, in addition, small numbers of adults seem to gain direct gratification from inflicting pain on children, as a society we place constraints on its use. Some of these constraints are formalized as law or regulation, or as resolutions passed by professional organizations, but many exist only as informal rules of social conduct. The latter vary from region to region in this country, and even from community to community. Any professional educator considering the therapeutic use of punishing procedures should be well informed about both the legal and social constraints on its use in the community where he or she is working. This paper will focus on social attitudes toward the use of corporal punishment, primarily spanking, paddling, and whipping, as expressed in public opinion polls, resolutions of professional organizations, and articles in newspapers and magazines.

PUBLIC OPINION REGARDING THE USE OF CORPORAL PUNISHMENT IN SCHOOLS

In denying the plaintiff's petition in *Ingraham v. Wright* (1977), Justice Powell argued that there exists a "background of historical and contemporary approval of reasonable corporal punishment" (p. 663).

> The use of corporal punishment in this country as a means of disciplining schoolchildren dates back to the colonial period. It has survived the transformation of primary and secondary education from the colonials' reliance on optional private arrangements to our present system of compulsory education and dependence on public schools. Despite the general abandonment of corporal punishment as a means of punishing criminal offenders, the practice continues to play a role in the public education of schoolchildren in most parts of the country. Professional and public opinion is sharply divided on the practice, and has been for more than a century. Yet we can discern no trend toward its elimination (Ingraham v. Wright, 1977, pp. 660-661).

He noted that 21 states explicitly authorized the use of moderate corporal punishment in public schools at the time he was writing whereas only two specifically prohibited its use. In a footnote, Powell added that "Opinion surveys taken since 1970 have consistently shown a majority of teachers and of the general public favoring moderate use of corporal punishment in the lower grades" (p. 661), citing Reardon and Reynolds (1972), and James (1963) as sources. Does an independent reading of the evidence from opinion surveys support Powell's argument?

On the whole, the answer is "yes", although much depends on the sample questioned, the framing of the question itself, and the researcher's tabulation of the responses. A variety of studies and polls in addition to those cited by Powell indicate that strong majorities of parents, teachers and school administrators, and in some cases, even students favor the use of corporal punishment in schools (*Pennsylvania School Journal*, 1976; Muesmeche and Sauls, 1976; *Nations Schools*, 1971; Drewes, Vroonland, and Baker, 1974).

Levine (1978) interpreted her data from a national survey sent to 1,000 public school teachers to mean that "more than half the sample (54%) could be said to oppose corporal punishment" *if* the group who opposed its use except in cases of bodily assault upon teachers or fellow pupils (46%) was added to those who opposed its use unequivocally (8%). Her optimistic conclusion that there is "a trend toward the abolition of corporal punishment in our schools" is only tenuously supported by her data. Other surveys that indicate less than majority support for corporal punishment in at least some situations are based on local or regional samples, but evidence for a strong national trend supporting its abolition is lacking.

These contemporary attitudes are related to the climate of concern about what is widely perceived and reported as an increase in the amount of vandalism and personal assault in the public schools. Concern about "discipline" has ranked at or near the top of the list of "problems" in Gallup Polls of public attitudes toward education taken in each of the last ten years ("Ninth annual", 1977). The January issue of the *Phi Delta Kappan*, the journal of the largest honorary professional fraternity of educators, is entitled "Special issue: The problems of discipline and violence in American education." With educators and the public fearing that discipline in the schools is breaking down, they are reluctant to give up a traditionally sanctioned method for controlling and reforming unruly pupils, corporal punishment.

The assumption of both pollsters and those polled appears to be that this problem behavior is willful and malicious. Environmental or personality factors are seldom mentioned. From the point of view of a majority of the public, students who "misbehave" in at least certain ways are rightly at risk of corporal punishment.

PROFESSIONAL OPINION

The largest national organizations of teachers, the American Federation of Teachers (AFT) and the National Education Association (NEA), have taken contrasting positions on the use of corporal punishment in schools. Officially, the AFT has no position, but strong sentiment within the organization appears to favor the retention of corporal punishment as one means of controlling pupil behavior (Spanking, 1977). There is more division in the NEA. A review of the complexities of its position is instructive.

In 1972, an NEA task force filed a report (Report, 1972) opposing the use of corporal punishment and recommended that the national group pass resolutions opposing its use and advocating passage of state laws outlawing its use. The report distinguished between corporal punishment and physical restraint. Corporal punishment, defined as the infliction of "bodily pain" upon a student, should be forbidden. Physical restraint of students should be permitted when necessary to protect self, other students or property from serious harm. The discussion in the report and the model statute do not address the use of electric shock or the "therapeutic" (rather than punishing) infliction of bodily pain.

The NEA task force report was adopted by the group's Board of Directors in 1972 and referred to its Executive Committee "for implementation as feasible" (NEA, 1977, p. 4). "The Board authorized the NEA President to send to all state affiliates a copy of the report on corporal punishment along with a letter calling attention to the model act (proposed in) the report and urging the state affiliates to work toward passage of such legislation" (NEA, 1977, p. 4). The actions of the Board were reported to the NEA Representative Assembly but that group took no action on its recommendations although the floor discussion revealed considerable opposition as well as support. The facts that the Board did not adopt a resolution directly opposing the use of corporal punishment in schools and that the Assembly took no formal action suggest that the opposition is strong.

Subsequently, the NEA filed a statement supporting the position of the plantiffs in the case of *Ingraham v. Wright*. The organization's description of its activity in the case again suggests lack of a clear mandate to oppose the use of corporal punishment from the NEA rank and file membership.

> (The) NEA contended that in administering corporal punishment public school officials should be subject to Eighth Amendment strictures (forbidding the use of cruel and unusual punishment). It was not NEA's contention that the Eighth Amendment protects public school students from *any and all* forms of corporal punishment, but simply that the specific punishments in this case transgressed constitutional bounds . . . . NEA took a similarly restrained position in regard to the students' right to a hearing (the Four-

teenth Amendment right to due process issue). It was not suggested that the hearing conform to a judicial proceeding, but simply that there at least be an informal give-and-take at which students are given an opportunity to explain their version of the facts. (NEA, 1977, pp. 2-3. Emphasis original. Parenthetical statements added.)

A recent NEA statement concludes, "By virtue of the actions taken by the Board of Directors in 1972, NEA is at present on record as opposing the use of corporal punishment in schools" (NEA, 1977, p. 4). A careful examination of their position suggests that this opposition is carefully qualified, however. Later discussion will indicate that such qualifications are characteristic of the positions taken by several other national professional organizations.

The Council for Exceptional Children, a national organization of educators and parents of children and youth with special needs, has adopted an official position statement which will be quoted in its entirety.

SECTION 404 CORPORAL COMMUNICATION

SECTION 404.1 The Council for Exceptional Children recognizes the necessity of corporal communication, direct physical contact between educators and children, in special education and the fact that almost all of the corporal communications between educators and students are either neutral or pleasant to both. Also, that positive reinforcement, in special education, frequently is given in the form of corporal communication. Because of those infrequent occasions in which a child may not welcome a given corporal communication, *The Council for Exceptional Children recognizes the planned use of aversive stimulation and negative reinforcement when those options are the treatment of choice, providing that the situations in which they are used are planned between the teacher and the teacher's supervisor, are made known to the parent or guardian, are applied prudently, and are evaluated and modified in terms of the results.*

SECTION 404.2 The Council for Exceptional Children also recognizes that at times staff members must physically intervene immediately in the behavior of a child to protect health, safety, or property.

SECTION 404.3 Further, the Council for Exceptional Children reminds its membership and citizens in general, of the availability of assault and battery statutes to protect children from abuse and calls upon its members to utilize such statutes in applicable situations. Further, The Council for Exceptional Children supports the prohibition of the use of corporal punishment in special education. Corporal punishment is here defined as a situation in which all of the following elements are present. There is a rule which an authority accuses a child of violating and seeks from the child an explanation where upon a judgment of guilt is made followed by physical contact and pain inflicted on the child. The Council for Exceptional Children finds no conditions under which corporal punishment so defined would be the treatment of choice in special education.

As written, this statement does not clearly require prior parental consent, although in the future such consent will presumably be required of special educators by the provisions of Public Law 94-142. The due process procedure outlined in Section 404.1 differs little from that criticized in Section 404.3 except that in the approved instance, the teacher's motivation is assumed to be "therapeutic."

The need for impartial advocacy for the child is not addressed. Again one notes the careful qualification which countenances the infliction of pain under some circumstances, even though the organization is officially "on record" as opposing the use of corporal punishment.

The Council of Representatives of the American Psychological Association (APA), a national organization of psychologists, in January 1975 adopted a resolution opposing the use of "corporal punishment." Because the language of this resolution (APA, 1975) can easily be misinterpreted, excerpts are quoted here and the intent as elaborated by Dr. Fred Strassburger of the APA staff at a 1977 National Institute of Education conference on corporal punishment (1977) discussed. The resolution reads in part:

> WHEREAS: Research has shown that the effective use of punishment in eliminating undesirable behavior requires precision in timing, duration, intensity, and specificity, as well as considerable sophistication in controlling a variety of relevant environmental and cognitive factors, such that punishment administered in institutional settings, without attention to all these factors, is likely to instill hostility, rage, and a sense of powerlessness without reducing the undesirable behavior;
>
> THEREFORE BE IT RESOLVED: That the American Psychological Association opposes the use of corporal punishment in schools, juvenile facilities, child care nurseries, and all other institutions, public or private, where children are cared for or educated.

Strassburger (1977) points out that the resolution emphasizes the word "corporal" (italicized in the original). The debate accompanying the resolution emphasized, according to Strassburger, that "only corporal punishment is excluded. . . . Other kinds of punishments may be used. This is particularly important to psychologists who are interested in behavior modification and who are using diverse techniques to influence behavior, especially in modifying the kind of self-abusive or self-destructive behavior of autistic kids, where some people feel they've gotten good results with electric shock, and other kinds of aversive techniques" (1977, p. 52). The distinction is apparently between "corporal" procedures like spanking and beating and "other" procedures like "electric shock." As Strassburger admits, it is a distinction nonpsychologists may find it hard to grasp.

The organizations that strongly advocate the abolition of the use of corporal punishment in schools and by parents such as the Committee to End Violence Against the Next Generation (Mauer, 1974) and the Center for the Study of Corporal Punishment and Alternatives in the Schools (Hyman, Bongiovanni, Friedman, & McDowell, 1977) seem to represent only a minority of parents, pupil personnel professionals, and classroom teachers. While no group of professionals argues that corporal punishment is good for children, most seem hesitant about prohibiting absolutely its use in schools, at least in certain forms.

Gene Maeroff, an education correspondent for the New York *Times*, expressed the typical feeling of educators as follows:

> What I've found over and over again is the feeling among teachers and administrators that to have corporal punishment available as an instrument

> of last resort is something that can help maintain discipline. Now, there isn't really any documentation for that, but there is a very strong feeling for it among teachers, and the principals ("Spanking", 1977, p. 9).

Most educators have ambivalent feelings about the use of corporal punishment. Other professionals appear to share this ambivalence. Most parents seem to feel confident corporal punishment will be used only when necessary rather than abusively.

The ebb and flow in professional opinion and practice resulting from this ambivalence is readily illustrated. For example, a recent issue of the Los Angeles *Times* (January 7, 1978) carried an article indicating a strong likelihood that the Los Angeles Board of Education would rescind a resolution passed 2½ years ago prohibiting the use of corporal punishment by teachers. (Note that a recently passed California law requires parental approval in writing prior to the administration of corporal punishment by school authorities.) The request for reconsideration was presented by the superintendent of schools with the strong support of teachers' and principals' organizations. Strong community support for return to a less restrictive policy on the use of corporal punishment was implied by the article. (Farley, Krentter, Russell, Blackwell, Finkelstein, and Hyman, 1977, have argued that there is a trend toward the elimination of corporal punishment in schools, but their argument is not adequately supported by the facts they present. Also, see Wise, 1977.)

PRESS REACTION TO THE INGRAHAM DECISION

National press reaction to the Ingraham decision provides an indicator of the media view of the use of corporal punishment. Many statements were strongly critical. Some samples follow.

After charging that teachers organizations in defending the decision as supporting their efforts to maintain "a healthy atmosphere" in the schools seemed to mean "a balance of terror, with unruly students held in check by the spectre of paddles stockpiled in the principal's office," the editors of the *New Yorker* (May 30, 1977) went on to comment:

> In reality, there is no balance of terror between adults and children. There is an enormous imbalance, with adults holding most of the power and children feeling most of the terror. The teachers who want the "option" of physical violence — not for self-defense but to enforce their rules — are talking as if, deprived of paddle technology, deprived even of the use of their bare hands, they could not find any other means of terrorizing children. This is not true . . . . The Supreme Court's majority opinion in the school-discipline case said that the Eighth Amendment protects prisoners but not school-children from "cruel and unusual punishments," because 'the prisoner and the schoolchild stand in wholly different circumstances, separated by the harsh facts of criminal conviction and incarceration.' But childhood, which is marked by systematic humiliation, large and small, is much more like incarceration than it is like a state of autonomous power against which adults must defend themselves and their rules with unlimited "options" (pp. 27-28).

Knitzer, writing an invited opinion piece in the *American Journal of Orthopsychiatry* (July, 1977), also predicted that the Court's decision opened the door to greater abuse of children in institutions.

> The court ruled that corporal punishment administered in the school setting, no matter how excessive, is not subject to the constitutional prohibition against cruel and unusual punishment, and, further, that no due process protections are required when corporal punishment is administered . . . . Despite the current professional and public popularity of child abuse as a cause, the institutional abuse of children still tends to be ignored and minimized in the very way the Court has ignored and minimized it . . . . The decision demands that we challenge the underlying attitude toward children that it reflects.
>
> It is an attitude not of respect for, but of hostility toward children — a "they get what they deserve" mentality (pp. 372-373).

And, Hechinger, writing in the *Saturday Review* (May 28, 1977) broadened his attack to include the "Burger Court" as a whole.

> For a symbolic of definition of the Burger Court's view of life and justice in America, there can be no better illustration than its latest ruling on corporal punishment in the public schools, handed down on April 19, 1977 . . . . It allied itself with the simplistic view of "law and order" that has its roots in the old-fashioned concept that to spare the rod is to spoil the child. In fact, Justice Lewis F. Powell, Jr., who wrote for the majority, based the retrogressive ruling in large measure on what he called a long history of resort to corporal punishment dating back to Colonial days. This is an astonishing effort to uphold a peculiarly dubious aspect of the "old verities" at the expense not only of the rights of children but also of a half-century of pedagogical progress (p. 14).

These excerpts give a sense of the tone of opinion expressed editorially in some widely read publications. It needs to be pointed out that these opinions may reflect a regional bias since a recent survey of editorial responses (McDowell & Friedman, 1978) to the Ingraham decision showed that the majority of editorial comment was favorable in all sections of the country except the Northeast and Middle Atlantic states, which is where all of the quoted publications originate even though they are national in distribution. Few critics stress the suggestion of the court's majority that it is possible to work to defend the rights of children by sensitizing local opinion and strengthening state and local regulation, although that is clearly one possible result of their criticisms.

THE PUNISHER IS ALSO "AT RISK"

The apparent ambivalence of many persons, both lay and professional, about the rightness of allowing continued use of corporal punishment in schools, plus the strong opposition to it expressed by influential members of the press create an atmosphere that is ripe for scapegoating. By analogy, for centuries public opinion accepted capital punishment as an appropriate penalty for many crimes, but people despised the executioner who carried out the actual slaying. In the same way, many parents and teachers today reluctantly accept a need to retain corporal punishment as a "last resort," but they don't like punishers.

Regardless of the technical legality of their use of punishment, school authorities employing it should not underestimate the psychological punishment that may be inflicted on them by an outraged community or parent. In an opinion column printed in the *National Elementary Principal* after the Baker decision in which the majority of the Supreme Court found in favor of the right of school authorities to use corporal punishment despite the objections of a child's parents, Pharis (1976) wrote:

> Finally, there is . . . . professional reputation. As we learned in the Red Scare of the early 50's, an accusation itself is sometimes sufficient to damn a person. If a principal is sued for molesting a minor, assaulting a child, or using cruel and unusual punishment, he or she may be acquitted in a court of law, but the ink stain on the principal's reputation remains. I doubt that the defendants in North Carolina (Baker case) feel like winners or enjoy the prominence that the case has afforded them (p. 95).

Pharis entitles his article "Spare the rod and save the principal," underlining the point that social consequences as well as professional ethics will restrict the sensitive educator's use of corporal punishment to "last resort" situations in which all features of formal and informal due process are met. This constraint on the behavior of persons considering its use is not the less powerful for all its lack of statutory authority.

It should be possible to identify tentatively some of the situational factors that are related to public approval or disapproval of the use of punishment in schools. As a first step, let us review briefly several cases in which punishment was or was not used.

First, the case of James Ingraham (*Ingraham v. Wright*, 1977) again. Here a black student in his early teens was paddled for what was apparently regarded as insolent or disruptive behavior (slowness in responding to a teacher's command). Corporal punishment seems to have been used frequently by the administrators at the school he attended. Numerous other instances were cited in testimony. A well publicized school policy outlined the procedures to be followed in the administration of punishment, and the community was said to be supportive of that policy. At issue for most parties to the case, including the judges of the District Court and the justices of the Supreme Court, was not the appropriateness of corporal punishment per se but only its severity. Being fourteen, black, and disruptive puts the student at risk of corporal punishment. Laying it on too severely, particularly in proportion to the announced offense, puts the punishing administrator at risk of public censure, and perhaps, prosecution or suit. Although the Supreme Court did not support the plaintiffs' charges that their constitutional rights had been violated, the majority opinion pointed out their right to seek redress in the civil and criminal courts.

Forewarned, the prudent principal knows when to withdraw, even when the student is in some sense at risk. On November 16, 1977, the Minneapolis *Tribune* carried an article on a dispute about the use of corporal punishment by administrators of the high school in Jones, Oklahoma, a suburb of Oklahoma City. This school had a well publicized rule stating that any student who had been tardy more than five times must submit to a paddling before being readmitted to school. The objecting student in this

case admitted knowing that "quite a few kids got licks" for tardiness, but she and her parents claimed two of the tardinesses should be excused and, regardless, the parents said would sue the school system rather than permit their daughter to be paddled. A follow-up story on November 24th said that an out of court settlement had been reached and the sixteen-year-old student, now further identified as president of the junior class, a cheerleader, and the football homecoming queen, had been reinstated without penalty. In this case, violation of a well-defined rule put the student at risk of the stated penalty, but the school administrators sensed a lack of support for their infliction of it because of the pupil's sex, peer group status, and the clearly expressed intention of the parents to make the matter public. The administrators backed down.

In the case of Russell Carl Baker (*Baker v. Owen*, 1975), they did not. Despite the stated ojections of his mother, who cited her concerns about her son's health and her abhorrence of corporal punishment as reasons, this sixth grader was struck twice on the buttocks with a wooden drawer divider. Pharis's (1977) comments on the experience of the defendents in this case have already been quoted. Here, the student violated an announced school rule against throwing kickballs when not on the playground and was punished by the teacher despite the mother's objections. The child was at risk because of a rule violation and because North Carolina law supports the teacher's right to use corporal punishment. Being male and of "punishable" age, he was protected against punishment mainly by his mother's objections to its use. The teacher sensed community support and administered what the court considered "reasonable" punishment anyway, thus exposing herself to efforts by the mother to punish her through court action. The "reasonableness" and lawfulness of the teacher's behavior did not protect her from a prolonged lawsuit. Did the school authorities in Oklahoma have this experience in mind when they settled out of court?

Other cases illustrating similar patterns could be cited. In general, they underline the pragmatic wisdom of Pharis's comment. Regardless of what the law says about the legality of an action, claiming one's right to act in the face of the determined opposition of only one individual (the punished person, that person's parent, friend or advocate) puts one at risk of social punishment that is not less painful for being nonstatutory.

To quote an old poem:

> This is the grave of John O'Day
> He died protecting his "right of way."
> He was right as right could be —
> He's also dead, as you can see.

The punisher, as well as the punished, is often "at risk."

Summary

To date, the Supreme Court has refused to accept the argument that students should be protected against unreasonable corporal punishment from teachers by the provisions of the Eighth Amendment and has also refused to specify minimal advance due process procedures. Since corpo-

ral punishment is currently permitted under the provisions of either the common law or express statute in all but three states, a chief responsibility of special educators considering the use of punishing procedures is to inform themselves fully about the details of state and local guidelines and regulations regarding their use.

Critical personal and professional, and perhaps even legal issues remain in the definition of what in practice is "reasonable" corporal punishment and "adequate" due process in a specific community with a specific student. Cases in which a parent or child advocate challenges the professional practice of an educator or psychologist who has used aversive procedures are relatively common and will probably increase in numbers as public sensitivity on the child abuse issue increases. Those bringing such charges can count on considerable support from the press if the response to the Ingraham decision is an indication, and will often find it easy to arouse the latent sympathy most Americans feel for a punished child. Public opinion may tolerate the use of reasonable corporal punishment as a last resort in extreme cases of problem behavior, but the punisher will usually find it difficult to rally support for challenged actions after the fact. Professional organizations tend to hedge on the issue. When challenged publically, educators who have used punishment without careful safeguards may find themselves in a scapegoat role with few defenders.

In the most narrow sense, special educators making use of punishing procedures have a selfish interest in planning protections against the more severe civil, criminal, and social penalties that might result. Beyond that, most will recognize the positive value in social pressures that push us toward better ways of educating children with special needs.

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Theory and Research on the Use of Aversive Procedures in the Education of Moderately Behaviorally Disordered and Emotionally Disturbed Children and Youth

Robert B. Rutherford, Jr.
Arizona State University

The use of punishment to suppress the inappropriate or maladaptive behaviors of moderately emotionally disturbed or behaviorally disordered children has been a sensitive and controversial issue for a number of years. Treatment, education, and control of "mentally ill" or "delinquent" children and youth have historically vacillated between punitive and permissive approaches to caregiving and discipline. While many nineteenth century and early twentieth century schools, mental hospitals, and juvenile detention facilities stressed punishment and retribution for wrongdoing or aberrant behaviors, the impact of Freud, Dewey, and others in the first half of this century influenced many youth serving institutions to abandon punitive control in favor of more therapeutic or rehabilitative approaches. This philosophic and moralistic rejection of punishment (Neill, 1960) was supported by many in the scientific community who questioned not only the ethics but the effectiveness of punishment as a treatment technique (Estes, 1944; Skinner, 1953; Bandura, 1962).

Bandura, for example, stated that "the ineffectiveness of punishment in eliminating undesired responses is abundantly documented . . . in research on both animal and human subjects" (1962, p. 299). He went on to list negative side of effects of punishment such as conditioned anxiety, avoidance of the punishing agents, provision of aggressive models for imitation, and increase in the frequency and amplitude of aggressive behavior.

In stating his position concerning the effects of punishment on instrumental responses, Skinner (1953) held that response suppression is temporary, and the side effects, such as fear and neurotic and psychotic disturbances, are not worth the temporary advantages of the use of punishment. Skinner (1965) highlighted some of the negative consequences of punishment in the classroom. While applauding the reform which has led to a decrease in corporal punishment in the classroom, he laments the shift to such noncorporal means as "ridicule, scolding, sarcasm, criticizing, incarcerating (being 'kept after school'), extra school or homework, the withdrawal of privileges, forced labor, ostracism, being put in silence, and fines" (p. 81). He went on to state that "In some respects they are less

objectionable than corporal punishment, but the pattern remains the same: the student spends a part of the day doing things he does not want to do" (p. 81).

Much of the literature on the education and treatment of emotionally disturbed or behaviorally disordered children continues to refute and abhor indiscriminate, random, and inconsistent punishment in schools and treatment facilities. However, a growing body of research evidence has developed since the early 1960's to support the effectiveness of a variety of consistent punishment procedures in the suppression of maladaptive behaviors of children and youth in controlled environments. The purpose of this paper will be to review and analyze this research evidence as it relates to the moderately disturbed or disordered child.

Definition of Punishment

Punishment has been defined as either the *act* of doing something aversive or painful to another to control that person's behavior, or it is defined by reference to the subsequent *effects* of that act on the "punished" individual's behavior.

In the first instance, punishment is viewed or defined by what one individual does to another. It is the procedure by which an aversive or noxious stimulus is applied following a given response. "Punishment," according to Glasser (1976), "is any treatment of another person that causes him pain, physical or mental . . . the purpose of punishment, however, is to change someone's behavior through fear, pain or loneliness" (p. 62). Glasser (1969) further states, "in punishment, pain follows an act that someone else disapproves of, and the someone else usually provides the pain . . ." (p.23). Skinner (1953) and Ferster, Culbertson and Boren (1975) have also defined punishment in procedural terms as the delivery of noxious stimuli following a given response. According to Ferster et al. punishment is "a procedure in which an operant performance is followed by an aversive stimulus. Punishment, therefore, is usually an interaction between a performance maintained by positive or negative reinforcement and aversive stimulus" (1975, p. 675).

In the second or alternative definition of punishment, the individual's behavior provides the key to the definition of punishment. Punishment only occurs if there is a reduction in the subsequent probability of the punished response contingent upon the aversive or punishing stimulus. Azrin and Holz (1966) define punishment as "a reduction of the future probability of a specific response as a result of the immediate delivery of a stimulus for that response" (p. 381). This latter definition is emphasized here because the vast majority of the empirical studies on punishment conducted since the early 1960's have measured punishment effects by measuring future probability of occurrence of punished behaviors.

Models of Aversive Control

In the investigation of the effects of aversive or punitive stimuli on the subsequent behavior of emotionally disturbed or behaviorally disordered

children and youth, four models of aversive control have been used. These are classical aversive conditioning, negative reinforcement, on-set punishment, and off-set punishment.

CLASSICAL AVERSIVE CONDITIONING

Aversive conditioning or aversion therapy involves a behavior reduction procedure where the stimulus that elicits the maladaptive behavior is repeatedly paired with an aversive stimulus. In the case of drug addiction, for example, the stimulus is the particular drug in question, the maladaptive behavior is drug taking, and the aversive stimulus may be electrical, chemical, or verbal in nature. The purpose of aversion therapy is to make the stimuli that cue the inappropriate behavior unpleasant, thus leading to a reduction in the behavior in question. As a function of this conditioning, fear or anxiety becomes associated with the once pleasurable stimulus, the drug, and physiological responses such as sweating, shortness of breath and rapid heart beat occur upon presentation of the drug, thus leading to a reduction or elimination of the drug taking behavior.

Most of the clinical research using this model has been with adult subjects in the modification of sexual, drug taking, alcohol consuming, smoking, or eating behaviors. One of the few studies that used a classical aversive conditioning paradigm with a child was conducted by MacCulloch, Williams and Birtles (1971) with a twelve year-old exhibitionist. Their procedure involved pairing electric shock with slides of adult females. The clinical results of this study were a reduction in self-reported compulsive thoughts towards older women and no further reported exhibiting episodes.

NEGATIVE REINFORCEMENT

Negative reinforcement refers to a behavior enhancement procedure where an aversive stimulus is contingently removed following a given behavior. Those behaviors which allow the individual to escape from or avoid unpleasant or aversive stimuli will be increased. Ferster et al. (1975) define negative reinforcement in terms of a behavior "whose frequency increases because it has terminated an aversive stimulus" (p. 674). An important distinction between negative reinforcement and punishment involves the fact that the former procedure provides a means for strengthening or increasing behavior while the latter procedure provides a way to weaken or suppress behavior.

Many behaviors that children emit at home or in school are maintained by negative reinforcement. Parents and teachers often rely on the threat of punishment or nagging to prompt children's behavior. As children respond in ways which avoid or escape the threat or the nagging, their responses are negatively reinforced, making them more likely to occur again in the future. More systematic uses of negative reinforcement with disturbed or disordered children and youth include earning time off of parole or probation, an assumed aversive situation, contingent upon attending school (Thorne, Tharp & Wetzel, 1967); improving social interaction of a chronic psychotic youth through avoidance of staff nagging (Fichter, Wallace,

Liberman & Davis, 1976); and the negative reinforcement of those appropriate behaviors which lead to escape from or termination of time-out (Leitenberg, 1965; Sachs, 1973).

ON-SET PUNISHMENT

On-set punishment is a behavior reduction procedure where an aversive stimulus is contingently applied following a given behavior. On-set punishment results in a reduction or suppression in the strength of the behavior in question. There are three types of on-set punishment reported in the literature on the treatment of emotionally disturbed or behaviorally disordered children and youth. These are physical aversives, overcorrection, and verbal aversives.

Physical aversives. The systematic application of physical aversives such as contingent electric shock (Lovaas, Freitag, Gold & Kassorla, 1965), noxious noise (Schlichter & Ratliff, 1971), aversive tickling (Greene & Hoats, 1971), and forced restraint (Giles & Wolf, 1966), has almost exclusively been with severely and profoundly disturbed and retarded children (Neel, 1978).

Although physical aversives in the form of corporal punishment have often been used in the classroom (Mauer, 1974), there has been little systematic analysis of the effects of corporal punishment on children's problem behaviors.

Overcorrection. Most of the overcorrection literature (Foxx & Azrin, 1972; 1973) has also dealt with more severely involved clients. Overcorrection has two components: (1) restitution, where the individual is required to restore the environment to a state vastly improved from that which existed prior to the behavior in question; and (2) positive practice, where the individual must repeatedly practice a positive behavior following a maladaptive behavior (Sulzer-Azaroff & Mayer, 1977). The limited research dealing with overcorrection procedures with mild to moderate behavior problems has focused on the positive practice component. Doleys, Wells, Hobbs, Roberts & Cartelli (1976), and Lahey, McNees and McNees (1973) found that positive practice was relatively ineffective. In comparison to social punishment and time-out respectively, positive practice failed to significantly reduce noncompliant behavior in the first study and an obscene "verbal tic" in the second study. Azrin and Powers (1975), on the other hand, found that requiring emotionally disturbed children to practice asking permission to speak or leave their seats was significantly more effective than teacher warnings, reminders, and praise for constructive classwork or loss of recess for disruptive behavior.

Because physical aversives and overcorrection have rarely been systematically analyzed in the literature on moderately disturbed or disordered children, the major emphasis here will be on verbal aversives or reprimands, an on-set punishment technique common to a number of studies conducted with this population of children and youth.

Verbal aversives. Verbal reprimands, negative attention, or social punishers include the use of terms such as "No!", "Stop!", "Don't do that!", which may (Bernal, Duryee, Pruett & Burns, 1968) or may not (Madsen, Becker, Thomas, Koser & Plager, 1970) be paired with other

aversive consequences. The use of these verbal reprimands or disapproval statements by teachers combines both the on-set of an aversive social stimulus, the particular verbal statement, and the withdrawal of a positive social stimulus, the reprimander's approval.

Before examining the effects of negative teacher attention on student behaviors, the research evidence which demonstrates effects of *any* teacher attention on student behavior will be examined. A number of studies have demonstrated reduction in classroom behavior problems through a combination of contingent teacher attention and praise for appropriate classroom behaviors and the systematic ignoring of inappropriate classroom behaviors (Becker, Madsen, Arnold & Thomas, 1967; Madsen, Becker & Thomas, 1968; Zimmerman & Zimmerman, 1962; Hall, Lund & Jackson, 1968; Walker & Buckley, 1968; Ward & Baker, 1968).

Madsen, Becker and Thomas (1968), in their classic study comparing the effects of rules, praise, and ignoring on the inappropriate behavior of three elementary school children, found that rules alone and rules plus ignoring of deviant behaviors were not effective in reducing these behaviors from their baseline rates. However, when contingent teacher praise was added to rules and ignoring, a marked reduction in inappropriate behavior occurred. The authors state that, "Praise for Appropriate Behaviors was probably the key teacher behavior in achieving effective classroom management" (p. 148).

Sajwaj and Dillon (1977) reviewed forty-two studies which investigated the effects of differential adult attention on 114 subjects. They reported 87 successes and 27 failures in the research literature. While this 76% success rate is impressive, the authors question the function of adult attention in the case of the failures. For example, Herbert, Pinkston, Hayden, Sajwaj, Pinkston, Cordua and Jackson (1973) and Sajwaj and Hedges (1971) demonstrated that adult attention and praise actually resulted in a suppression of the approved behaviors and thus functioned as an aversive consequence for the children.

Several observational studies have been conducted to determine naturally occurring rates of teacher verbal reinforcement or approval (White, 1975) and teacher verbal punishment or disapproval (Forness, Frankel & Landman, 1976). White (1975), in summarizing sixteen studies with 104 teachers, found that teachers consistently had higher overall rates of verbal disapproval than verbal approval of student behaviors. It was apparent that although teachers had higher rates of approval to disapproval for "instructional" student behaviors, they had significantly higher rates of disapproval to approval for "managerial" student behaviors. There was an almost nonexistent rate of teacher approval for managerial or noninstructional student behavior.

Forness et al. (1976) observed eight preschool teachers in a university psychiatric hospital. The results of their observations indicate that teacher response repertoires were comprised of approximately 45% aversives and 55% praise. Over 90% of the aversives used by these teachers were verbal aversives classed as "incorrect," "soft reprimand," "warning," or "loud reprimand."

While it appears that naturally occurring rates of teacher verbal aversives are relatively high, several investigators have questioned the effectiveness of this teacher behavior and have even found that reprimands may increase the very behaviors targeted for suppression. Thomas, Becker and Armstrong (1968) demonstrated that when teacher disapproval responses were tripled, significant increases in motor and noisemaking aspects of inappropriate behavior were observed, while approval responses for appropriate behaviors led to a decrease in disruption. In a related study, Madsen, Becker, Thomas, Koser and Plager (1970) found that contingent "Sit-Down" commands increased standing responses while praise for sitting lowered the rate of standing.

Much of the literature on verbal or social punishers, however, has demonstrated the effectiveness of verbal aversives with moderate behavior problems of children (O'Leary & Becker, 1968; McAllister, Stachowiak, Baer & Conderman, 1969; O'Leary, Kaufman, Kass & Drabman, 1970; Hall, Axelrod, Foundopolos, Shellman, Campbell & Cranston, 1971; Sajwaj, Culver, Hall & Lehr, 1973; Jones & Miller, 1974; Doleys, Wells, Hobbs, Roberts & Cartelli, 1976).

O'Leary and his colleagues compared the effects of loud and soft reprimands on the disruptive behavior of children in two studies (O'Leary & Becker, 1968; O'Leary et al, 1970). In the first study, the investigators measured the behavior of 19 first graders. During baseline disruptive behaviors occurred on the average of 54% of the time intervals observed. When appropriate behaviors were praised and disruptive behaviors ignored, disruptive behavior dropped to an average of 32%. During the second intervention involving teacher quiet reprimands, the children's disruptive behavior rose slightly to 39%. A third intervention, teacher loud reprimands, increased disruptive behaviors to 53%. Finally, the praise and ignoring procedure was reinstated and the children's disruptive behavior dropped to 35%. Loud reprimands appeared to reinforce disruptive behavior while soft reprimands may have had a suppressive effect on these behaviors.

In the second study, O'Leary et al. (1970) expanded the comparison of loud and soft teacher reprimands. They found that when teachers used soft reprimands, audible only to the target child, they were effective in reducing disruptive behavior in seven of nine children. Loud reprimands, audible to the whole class, again appeared to increase the children's disruptive behavior.

McAllister et al. (1969) showed that a combination of teacher verbal disapproval for turning around and inappropriate talking and teacher verbal praise for appropriate behaviors substantially reduced the target behaviors in a secondary school classroom. In addition, Hall et al. (1971) and Sajwaj et al. (1973) used similar strong verbal reprimands to significantly suppress throwing of objects in the first study and biting and pinching in the second study. Both of these studies used a loud reprimand to control the disruptive behaviors of these primary grade students.

In a private school for behaviorally disordered children, Jones and Miller (1974) observed four teachers and their use of negative attention. The two "comparison teachers" led orderly discussions in their class-

rooms while the "target teachers" led discussions that were characterized by excessive disruptiveness. Target teachers were taught to deliver negative attention in a manner similar to the comparison teachers: namely, to use mild negative attention, such as hand gestures or short, low-intensity verbalizations such as "that's enough" or "not now": react quickly to the disruptive behavior, and stand close to the offending student when delivering the negative attention. The results of this study indicated that teachers could be taught to use negative attention and that negative attention was effective in reducing group disruptions in the classroom.

Finally, Doleys et al. (1976) compared the effects of social punishment, positive practice, and time-out on the noncompliant behavior of four children in a center for the developmentally handicapped. Social punishment was defined as the experimenter walking to the child following noncompliance to a command, holding his shoulders firmly, saying in a loud, scolding voice "you did not do as I asked right away and I don't like it when you disobey me!", putting hands on hips, and "glaring" silently at the child for 40 seconds. Positive practice occurred by having the experimenter physically lead the child to the commanded task following noncompliance and manually guiding him through the activity for a 40 second period. Time-out, the third punishment procedure, was also made contingent on noncompliance by having the child stand in the corner for 40 seconds for each instance of noncompliant behavior. Doleys et al. (1976) found that social punishment was relatively more effective than either positive practice or time-out in reducing these behaviors.

Discussion. Verbal aversives, verbal reprimands, social punishment, or teacher negative attention are behavior reduction techniques that have been used in practically all classroom situations to some degree. The systematic analysis of the effects of these techniques has only occurred over the past ten years however. The research evidence suggests that while positive social reinforcement is an effective technique for altering many classroom behaviors, verbal aversives, in combination with social reinforcement, may have even greater effects on children's behavior.

OFF-SET PUNISHMENT

Off-set punishment involves the contingent removal of a positive stimulus or event following a given maladaptive or inappropriate behavior. Off-set punishment, like on-set punishment, results in a decrease in the subsequent probability of occurrence of the behavior. There are two off-set punishment techniques that have been extensively investigated in the literature on moderate emotional disturbance or behavior disorders of children and youth. These procedures are response cost and time-out.

Response cost. This procedure (Weiner, 1963; Kazdin, 1972) consists of the withdrawal or removal of a quantity of previously acquired reinforcers contingent upon a response. The two most common applications of response cost involve removal of the opportunity to participate in specified activities and token removal, i.e. fines within token economy systems following inappropriate behavior.

Response cost activity loss has frequently been used by parents and teachers to control children's behavior. Loss of television privileges or loss

of recess are common consequences following many children's inappropriate behaviors. The systematic analysis of response cost, however, is a relatively recent phenomenon. Baer (1962), in a laboratory investigation, showed that preschool children's thumb sucking behavior was significantly reduced when these responses resulted in the termination of a cartoon for short intervals of time.

Applied investigations of response cost using activity loss have involved loss of off-ward privileges contingent upon soiling behaviors of a ten-year-old emotionally disturbed boy (Gelber & Meyer, 1965); loss of access to a favorite person following a ten-year-old boy's stealing (Wetzel, 1966); loss of five minutes of gym time for being out-of-seat (Schmidt & Ulrich, 1969); loss of five minutes of after school free time for being out-of-seat (Hall et al., 1971); removal of name slips contingent on crying, whining, and complaining of an emotionally disturbed boy (Hall et al., 1971); loss of extra free time for having more instances of slouching or talking out than one's competitive partner (Sajwaj et al., 1973); and loss of group free time if stolen items were not returned (Switzer, Feal & Bailey, 1977).

Wetzel (1966), in the clinical case study of a "compulsive" thief, successfully eliminated stealing behaviors by making the loss of opportunity to visit a friendly cook contingent upon stealing. Dinsmoor (1966) questioned whether a portion of Wetzel's success was due to changing the expectations of the child care staff rather than the punishment contingency and Lang (1966) criticized Wetzel's study for failure to use more verbal mediators to build theft inhibition on the subject. However, while both of these criticisms have merit, Wetzel's early attempt to control behavior with a systematic response cost procedure was successful.

In another case involving stealing behavior, Switzer et al. (1977) showed that a significant reduction and possible elimination of thefts was achieved through a group punishment contingency. This multiple-baseline study across three second-grade clsssrooms demonstrated that loss of a ten minute free time period contingent upon failure to return stolen items successfully reduced thefts in all three classrooms.

Schmidt and Ulrich (1969) used a group reinforcement contingency of two minutes of additional gym time when noise level remained below 42 decibles on a sound level meter combined with an individual response cost contingency of a five minute loss of gym time for those individuals who exceeded the 42 decibel range or were out of their seats. While the reinforcement contingency alone resulted in a suppression of noise level, the addition of the response cost contingency continued to keep noise level low, greatly decreased out-of-seat behavior, and reduced teacher reprimands.

In a similar study, Sulzbacher and Houser (1968) established a group contingency of one minute less of a special ten minute recess of each instance of a "naughty finger" or raised fist with middle finger extended, verbal reference to it, or "tattling" about another child's use of the "naughty finger." This successful study was one of the few cases where only a response cost procedure was used. No reinforcement was available for periods of time without the "naughty finger."

Hall et al. (1971) summarized two response cost studies. In the first instance, complaining behavior was eliminated by giving a child slips of paper with his name on them and then systematically taking back one slip from him for each complaint. Although there was no backup reinforcer available for the slips of paper, their removal proved to be aversive to the child and his complaining behaviors decreased markedly. In the other study by Hall and his colleagues, out-of-seat behavior resulted in remaining after school for five minutes for each instance. While these investigators failed to reinstate their intervention following a reversal period where out-of-seat increased seven-fold, the study demonstrates the effectiveness of a systematically applied loss of activity response cost procedure.

Sajwaj et al. (1973) withdrew ten minutes of free time from the child in each pair who had the lowest total number of points at the end of the class period. Each child in the pair started the period with 100 points and then lost one point each time he or she is slouched or talked out. In a second phase of this study, the free time period was eliminated altogether and winners, those with the most remaining points, were publically announced and praised. Both slouching and talkouts increased markedly. When the response cost procedure was reintroduced, both of these behaviors again were practically eliminated.

Token loss within a token economy system, where tokens or points are earned for appropriate behaviors and are lost or withdrawn for inappropriate behaviors, is the procedure most frequently studied in response cost investigations. Several investigators have compared the effects of token gain and token loss on the behavior of children. Iwata and Bailey (1974) divided elementary school children into two groups. Following baseline, one group earned points for following classroom rules and other group was given a quantity of points and then contingently lost those points for violating classroom rules. After a brief reversal period, the groups switched contingencies. The results indicated that the procedures were equally effective in reducing rule violations and off-task behavior. Also, students expressed no clearcut preferences for one procedure over the other.

Other research has also demonstrated that token application and withdrawal are equally effective in changing children's behavior (Kaufman & O'Leary, 1972; Hundert, 1976; Bucher & Hawkins, 1973) when they are experimentally compared. Kaufman and O'Leary (1972) showed that reward and cost token procedures were very effective in producing marked reductions in disruptive behavior of emotionally disturbed adolescents. Also, both procedures led to a significant increase in educational output and reading achievement. This study used a procedure similar to the one devised by Iwata and Bailey (1974) where a "Reward Class" of eight students earned up to ten tokens for appropriate behavior and a "Cost Class" of eight students was given ten "free" tokens and then lost tokens one at a time for rule infractions.

Hundert (1976) used six elementary school children and initiated three token interventions in counterbalanced sequence. The three interventions were token reinforcement, response cost, and combination of both.

Again, he found significant effects over baseline rates as a result of the three procedures but no differential effects between them. Again, also, the children expressed no preference for any one of the procedures.

Bucher and Hawkins (1973) also found that rate of performance under both reward and removal contingencies was considerable higher than under a neutral condition. McLaughlin and Malaby (1972), however, found that while contingent point loss for inappropriate verbalizations was correlated with a low but steady rate of such verbalizations, point gain contingent upon quiet behavior was accompanied by a marked decrease in inappropriate verbalizations. Phillips, Phillips, Fixsen and Wolf (1971), on the other hand, in their work with predelinquent adolescents, found that a point loss procedure was more effective than a point gain procedure on raising the rate of correctly answered quiz problems based on a television news program.

While the above studies compared the effects of reward versus cost token economies, the majority of the investigations used a procedure where reward and cost were combined to maximize effects of the total token system. Token systems which include response cost have been used to eliminate such behaviors as aggressive statements (Phillips, 1968); various "delinquent" behaviors (Burchard & Barrera, 1972); out-of-seat behavior (Wolf, Hanley, King, Lachowicz & Giles, 1970); tardiness and room cleaning behaviors (Phillips et al., 1971); and disruptive behaviors (McNamara, 1971; Broden, Hall, Dunlap & Clark, 1970). All of these studies found a combined program of rewards and costs to be significantly more effective than baseline conditions when neither consequence was available.

There are several possible adverse side effects or disadvantages of response cost procedures in token economies which have been noted in the literature. First, the procedure does not have universal reductive effect (McLaughlin & Malaby, 1972). It cannot be assumed that token costs will automatically reduce the maladaptive behavior in question. This is probably due to the differences in the reinforcement and punishment histories of the subjects. Second, while a number of studies have shown that subjects will not escape from or avoid response cost situations (Bucher & Hawkins, 1973; Phillips et al., (1971), occasional studies such as the one by Boren and Coleman (1970) demonstrate that implementing a fine for failing to attend a ward meeting increased the number of subjects who avoided the situation all together. Third, response cost may lead to aggressive responses (Sloane, Young & Marcusen, 1977) where subjects refuse to pay fines (Doty, McInnis & Paul, 1974) or lash out verbally against those who fine them (Meichenbaum, Bowers & Ross, 1968). A fourth possible disadvantage of response cost has been identified by Iwata and Bailey (1974) where they note that response cost, when relied upon exclusively, causes staff to deliver fewer verbal reinforcers under this condition than under a token reinforcement condition. Fifth, Kazdin (1977) notes that response cost alone places emphasis on what the individual is not supposed to do. Response cost, like other punishment procedures, is not likely to result in the development of prosocial behaviors. Reinforcement is necessary to

develop prosocial behaviors as alternatives to the behaviors suppressed by response cost.

Discussion. Response cost differs from several other behavior reduction techniques. While extinction is a procedure where behavior previously followed by reinforcers no longer receives those reinforcers, response cost involves the removal of reinforcing events or privileges in the possession of or available to the individual (Gardener, 1977). In response cost, an aversive event follows behavior, in extinction, no event follows the behavior (Kazdin, 1972).

Time-out and response cost are different procedures, as well, for reducing behavior. In time-out there is a period of time during which reinforcers are no longer available (Leitenberg, 1965), whereas, with response cost, there is not necessarily a time restriction on earning further reinforcers (Kazdin, 1972). Several studies have combined time-out and response cost in an attempt to maximize the suppressive aspects of both of these techniques. For example, Burchard (1967) used the loss of four tokens and sitting quietly in the day room as a consequence for disruptive but nonviolent behaviors of delinquent adolescents. In addition, a fifteen token fine and a thirty minute locked seclusion for violent behaviors was initiated. These procedures were marginally effective in reducing the behaviors in question. Winkler (1970) combined response cost and time-out where subjects had to pay more tokens for backup reinforcers than the usual cost for a certain period of time following maladaptive behaviors.

Time-out. Time-out is "a procedure by which access to the sources of reinforcement is removed for a particular time period, contingent upon the omission of a (maladaptive) response" (Sulzer-Azaroff & Mayer, 1977, p. 281). Johnston (1972) notes that the time-out paradigm involves both the withdrawal of the reinforcing stimuli that maintain the behavior in question, and the simultaneous delivery of stimuli signalling, and paired with, a period of extinction. Effective time-out results in the suppression of the targeted maladaptive behavior, thus time-out meets the response decrement definition of punishment (Azrin & Holz, 1966). There are six levels or types of response contingent time-out. These are: ignoring, contingent observation, removal of materials, reduction of response maintenance stimuli, exclusion, and seclusion.

Ignoring or withholding of adult social attention for maladaptive behaviors is a time-out procedure which involves having the adult turn away from and "ignore" the child's inappropriate behavior a set period of time. Watson (1972), for example, instructed the ward staff in a psychiatric setting to completely ignore a psychotic child's temper tantrums for five minutes. Risley and Wolf (1967) eliminated distractability and hyperactivity in echolalic children by looking away from the children or leaving the room contingent upon these behaviors.

MacArthur and Hawkins (1974) modified the behavior of an emotionally disturbed boy in a regular classroom setting by having a special tutor reinforce the child for in-seat behavior and contingently withdraw reinforcement by initiating a five-minute social time-out for out-of-seat behavior.

In a variation of the withdrawal of social attention technique, Carlson, Arnold, Becker and Madsen (1968) had a teacher aide hold but not otherwise interact with or attend to an eight-year-old girl contingent upon her tantrum behavior in the classroom. In addition to withholding adult attention for this behavior, the child's peers were also reinforced for ignoring her tantrums.

Wasik, Senn, Welch and Cooper (1969) used two types of time-out to control the disruptive behaviors of two acting-out second grade girls. The withholding of adult social attention time-out was contingent upon the girls' attention-getting behaviors. The teacher was instructed to turn away from them when they emitted behaviors deemed inappropriate, e.g. mildly resisting authority or observing passively. Seclusion time-out involved removing the children from the classroom and placing them in an isolation room for five minutes contingent upon aggressive or resistive behaviors. This procedure was initiated for behaviors deemed unacceptable in the classroom, e.g. aggressive behavior or physically resisting authority. Both types of time-out were effective in suppressing the respective contingent behaviors with both girls. Abbott (1969) and Sibley, Abbott and Cooper (1969) obtained similar results by combining ignoring for inappropriate behavior and seclusion time-out for the unacceptable behavior of a preschool behaviorally disordered boy.

Contingent observation is a time-out technique where the child is removed from a reinforcing group or activity for a period of time to a place where he or she can continue to observe the activity but not participate in it. Porterfield, Herbert-Jackson and Risley (1976) used this mild type of time-out with toddlers in a day-care program contingent upon such disruptive behaviors as aggression, crying and fussing, tantruming, destructive use of toys, and creating a dangerous situation. Contingent observation involved having the caregivers remove the child to the periphery of the group or activity following one of the disruptive behaviors and instruct the child to observe the other children behave appropriately. Following quiet observation for less than a minute, the child was invited to rejoin the group or activity. This time-out technique resulted in a marked reduction in the number of disruptive and aggressive behaviors of the children in comparison to a more traditional redirection condition where caregivers described the form and inappropriateness of the child's disruptive or aggressive behavior and redirected him or her to an alternative toy or activity.

Removal of materials, a third type of time-out, is commonly used when the child uses materials inappropriately. The procedure involves taking the materials or activity away from the child for misbehavior rather than removing the child from the activity. The materials are reintroduced to the child following a brief period of appropriate behavior. For example, Barton, Guess, Garcia and Baer (1970) contingently removed food trays to modify the inappropriate table manners and eating behaviors of institutionalized retarded children. The trays were removed for short periods of time after each inappropriate behavior. These behaviors decreased markedly.

Reduction of response maintenance stimuli, which involves the reduction or elimination of the situational or environmental stimuli that are

necessary for the response to occur, is a fourth type of time-out. Several examples of this procedure have been used in clinical studies with severely emotionally disturbed children. Hewett (1964) used contingent darkness to modify the speech behavior of an autistic boy where inappropriate responses resulted in immersing the child in darkness for a brief period of time. Blake and Moss (1967) used a similar booth with a shutter that could be lowered for several seconds when a four-year-old elective mute girl cried or did not look in the experimenter's eyes on command.

An interesting variation of this time-out procedure was reported by Kubany, Weiss and Sloggett (1971) in their use of the "good behavior clock" with a hyperactive, loud, demanding, oppositional, and disruptive six-year-old boy. Because an isolation room was not available and the child refused to be isolated from his classmates within the classroom, a special clock was set up so that when he was behaving appropriately the clock was running. For every two minutes of running clock time, the child earned treats for himself and his classmates. When he misbehaved, the clock was turned off for fifteen seconds. If he continued to misbehave, the time-out contingency remained in effect, i.e. the clock did not run. His disruptive behavior dropped from 88 percent during baseline to less than 15 percent at the end of the study.

Exclusion, the fifth time-out procedure, involves the removal of the child from the reinforcing environment for a set period of time. Examples of exclusion include removal of the child from the cafeteria contingent upon inappropriate eating behavior (Henricksen & Doughty, 1967); two minutes of being seated outside the classroom for disruptive and assaultive behavior in the classroom (Briskin & Gardener, 1968); and systematic suspension from public school classrooms for aggressive behaviors (Brown & Shields, 1967).

Briskin and Gardener (1968) established an exclusion time-out procedure with a behaviorally disordered three-year-old girl. Contingent upon such behaviors as screaming, throwing things, crying and whining, biting, hitting, and grabbing, the child's mother removed her from the classroom for two minutes following each episode. The child's percentage of disruptive behavior in the classroom dropped from 54 percent in the baseline phase to 2 percent in the second treatment phase.

Seclusion, the sixth time-out procedure, is the one cited most often in the time-out literature. Systematic seclusion generally involves placing the child in a specially designed isolation room or cubicle for a short period of time contingent upon some misbehavior.

Whelan and Haring (1966) were the first to report the use of a time-out or isolation room in the modification of the maladaptive behaviors of emotionally disturbed children. This type of time-out, which Whelan (1968) equated with the psychoeducational procedure of antiseptic bouncing (Long & Newman, 1965), is effective only if the classroom environment from which the child is removed is more reinforcing than the isolation area in which he is placed.

Support for the assumption that seclusion time-out can be an effective behavior reduction procedure is derived the results of many studies reported in the literature. Burchard and Tyler (1965), for example, controlled

the "unacceptable" behaviors of an institutionalized delinquent adolescent by initiating two and three hour time-outs contingent upon these behaviors. Tyler and Brown (1967) used a much shorter time-out period (15 minutes) to reduce disruptive behaviors of delinquent boys around a pool table. In another study with delinquent boys, Burchard and Barrera (1972) varied response cost and time-out procedures using five token fines combined with five minute time-outs for maladaptive behaviors, five token fines alone, five minute time-outs alone, a thirty token fine alone, and a thirty minute time-out alone. Only a thirty token fine or a thirty minute time-out suppressed the behaviors appreciably by itself.

Seclusion time-out appears to be an effective behavior reduction technique with younger children as well. Sloane (1968) successfully used a brief two-minute time-out in an isolation room for extreme aggressiveness of preschool children. In a similar study, Sachs (1973) was successful in reducing the uncooperative behavior of a five-year-old boy by placing him in a darkened 5 ft X 5 ft time-out room upon failure to obey three commands in a row.

Drabman and Spitalnik (1973), in a well designed multiple baseline study, investigated the effects of social isolation on the out-of-seat and aggressive behaviors of five children in a state residential child psychiatric institution. The children were placed in isolation for a minimum of ten minutes for each instance of these behaviors but were not placed in isolation for a third category of disruptive behavior, nonpermitted vocalization. Their results indicated that both out-of-seat and aggressive responses were drastically reduced as a result of the time-out contingency and that the rate of the unpunished disruptive vocalizations remained unchanged. A critical factor for the success of time-out appears to be the positive reinforcement available in the classroom. This procedure will only be effective if there is sufficient positive reinforcement available in the classroom so that removal from that setting, for no matter how short a time period, will be aversive to the child.

Lahey, McNees, and McNees (1973), in their comparative study of the effects of instructed repetition, i.e. overcorrection, and seclusion time-out, found that a five minute time-out was more effective and much easier for the classroom teacher to implement than the four daily fifteen minute positive practice repetition sessions. These two factors, effectiveness of time-out in suppressing inappropriate behaviors and relative ease of application once the time-out procedure has been established, have led to the increased popularity of this technique with moderately disturbed or disordered children and youth (MacDonough & Forehand, 1973; Patterson & White, 1969).

With a few notable exceptions (Pendergrass, 1971; Tyler & Brown, 1967) time-out has been initiated in conjunction with systematic positive reinforcement for appropriate behaviors. Pendergrass (1971) investigated the relative effects of various durations of time-out on the hitting behavior of a five-year-old "brain-damaged" girl. No programmatic application of positive reinforcement for appropriate competing responses was included in his procedure. While various durations of response contingent time-out were successful in suppressing hitting behaviors, the author noted that

when these behaviors were suppressed, the child spent long periods lying face down on the floor. He concluded that behaviors which are suppressed by punishment are not spontaneously replaced by alternative, desirable behaviors.

In a study of the effects of swift, brief isolation as a group control device for institutional delinquents, Tyler and Brown (1967) found that this single operation was effective in reducing maladaptive behavior. As in the Pendergrass (1971) study, no systematic program of positive reinforcement was available for appropriate behavior. The authors, however, note that a more effective procedure would have included the reinforcement and shaping of socially approved behavior along with the punishment for misbehavior.

Hawkins and Hayes (1974), in their description of the School Adjustment Program for behaviorally disordered children, describe the contingent use of praise, attention, and token reinforcers for prosocial and academic behaviors and contingent token withdrawal and contingent time-out for inappropriate and disruptive behaviors.

Walker in his associates at the University of Oregon (Walker, Mattson & Buckley, 1969; Mattos, Mattson, Walker & Buckley, 1969) and Patterson and his colleagues at the same institution (Patterson, Shaw & Ebner, 1969; Patterson & White, 1969) have developed time-out procedures applicable in classroom settings. These investigators have contributed significantly to the technology of the time-out process by analyzing the effects of systematically reinforcing appropriate social and academic behaviors and punishing, through time-out, the deviant social behavior of behaviorally disordered children.

Seclusion time-out has also been increasingly used in home settings to help parents control the noncompliant behavior of their children (Patterson, Reid, Jones & Conger, 1975; Patterson, 1975). The procedure of placing the child in a socially isolating, nonstimulating area of the home has proved effective in reducing objectionable behaviors of a four-year-old behaviorally disordered boy (Hawkins, Peterson, Schweid & Bijou, 1966), in substantially decreasing the oppositional behavior of a five and a six-year-old boy (Wahler, 1969), and in eliminating the nonassertive crying behavior of a nine-year-old boy (Patterson, 1972).

Discussion. Response contingent time-out, in its various forms from simple ignoring to physical isolation, has demonstrated aversive properties in relation to the behaviors targeted for suppression. Coughlin (1972) and Leitenberg (1965) both suggested in their reviews that withdrawing positive reinforcement or time-out from positive reinforcement is an aversive event and that behavior is suppressed when this event contingently follows the behavior. MacDonough and Forehand (1973) have reviewed a number of parameters of response contingent time-out and have tentatively concluded that: (1) a verbalized reason for placement in time-out did not appear to facilitate the effectiveness of time-out; (2) the effectiveness of warnings prior to time-out was unclear; (3) while instructional rather than physical force means of placing a child in time-out may be theoretically preferable because aggression is not modeled and the interaction between the child and the teacher is kept at a minimum, few studies have

mentioned the particular placement technique used; (4) isolation time-out appears to be more effective than same-area time-out because competing reinforcement for maladaptive behaviors can more effectively be controlled; (5) short duration time-out, e.g. one to fifteen minutes, appears to be as effective as longer duration time-out, e.g. thirty minutes to three hours, if the individual has not had prior experience with longer time-out periods; (6) the presence or absence of a signal to indicate the beginning and end of time-out has not been systematically analyzed with children; (7) continuous versus intermittent schedules of time-out should be balanced to obtain an optional balance between suppression and recovery in treating children; and (8) release from time-out should be contingent upon specified periods of desirable behavior within the time-out situation.

Time-out, particularly seclusion time-out has recently come under a great deal of judicial and legislative scrutiny in institutions for the retarded, the delinquent, and the mentally ill. In the *Wyatt vs. Stickney* (1972) decision, the court held that the right to treatment included the right to be free from prolonged isolation. Seclusion time-out is permitted if less restrictive means for controlling behavior are not feasible. However, therapeutic time-out can only be for one hour or less. The *Morales vs Turman* (1975) decision requires due process hearings for all time-out procedures which involve isolation of over one hour. With this judicial monitoring of time-out procedures in mind, Gast and Nelson (1977) developed a set of guidelines for time-out in the classroom which emphasized that procedures should be systematically planned, carefully supervised, and continually evaluated.

Conclusion

The use of aversive procedures in the education of emotionally disturbed and behaviorally disordered children and youth has been the cause for considerable debate in the educational and psychological literature over the past two decades.

Mayer, Sulzer and Cody (1968), in their review of punishment in the classroom, note such possible negative consequences of punishment as negative generalization, withdrawal, aggression, negative classmate reactions, and lowered self-esteem. Rutherford and Neel (1978) have identified ten possible limitations of punishment that have appeared in the animal and human punishment literature. These limitations include: (1) punishment may suppress the behavior in all situations when suppression is desired only in a specified setting or behaviors related to the one punished may be inadvertently suppressed; (2) punishment may elicit adverse emotional behaviors; (3) punishment may only affect the child's behavior in specific situations and then only temporarily; (4) punishment may elicit avoidance and escape behaviors; (6) punishment does not eliminate the reinforcement the child may continue to receive from the performance of certain maladaptive behaviors; (7) punishment may become very reinforcing to the punisher and thus may increase markedly; (8) punishment provides an aggressive model for the child; (9) punishment may result in aggressive reactions by the child who is punished; and (10) punishment

may spill over to affect peers' behaviors. While each of these limitations are rarely universal across punishment applications, they are, in combination, important cautions that should be addressed before establishing aversive procedures to control emotionally disturbed or behaviorally disordered children's maladaptive behaviors.

The bulk of the current empirical evidence on punishment in the classroom, however, supports the effectiveness of this procedure in suppressing the inappropriate behaviors of children and youth (Parke, 1970; MacMillan, Forness & Trumbull, 1973; Gardener, 1969). Solomon (1964) and Aronfreed (1968), having reviewed a considerable body of research literature on punishment, conclude that punishment is effective in changing behaviors and that, in fact, punishment plays an important and necessary role in the socialization process. Baer (1970; 1971) holds that resistance to the use of punishment is based upon moral not scientific grounds. He states that, "the moral position that pain is bad and should always be avoided becomes itself immoral when it prevents us from helping persons who have learned behavior that puts them in even greater pain" (p. 34). Solomon (1964) and Johnston (1972; 1974) support Baer's position that the decision of what therapeutic procedures are valuable and effective be made on the basis of scientific and empirical evidence rather than on the basis of personal moral philosophy.

Whether the decision to use punishment can ever be divorced entirely from moral judgment is debatable, however. Punishment has social implications that go beyond the question of effectiveness. Mauer (1974), for example, states emphatically that moral judgments cannot be ignored. She holds that the controlled, tightly-structured approach to most punishment studies, while effective in changing target behaviors, ignores both the reality of lay interpretations and use of punishment and the long term, unmeasured effects of the punishment process.

As Azrin and Holz state: "Punishment appears to be here to stay" (1966, p. 439). The questions then, are first, whether punishment, given its *possible* detrimental effects, is the treatment of choice for this behavior of this child at this time, and second, if punishment is the treatment of choice, what are guidelines to the most effective use of punishment? The answer to the first question is a moral one and the answer to the second question is an empirical one.

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Research Findings Regarding the Use of Punishment Procedures with Severely Behavior Disordered Children

Richard S. Neel
University of Washington

The study of the effects of punishment on children has received widespread attention over the past several decades. The scope of the investigation has been very broad. Animal studies have been conducted to investigate the properties of aversive stimuli and the effects of punishment on animal behavior. Several studies have been conducted to see if humans behave similarly to animals under punishing circumstances. Many of these studies have investigated the effects of various forms of punishment on the behaviors of severely behavior disordered children.

Who are these severely behavior disordered children? They are frequently called autistic, infantile autistic, emotionally disturbed, psychotic, schizophrenic, childhood schizophrenic, and behavior disordered. Because there is neither a single etiology nor a specific syndrome that distinguishes these children, they are likely to be given a variety of labels. Much has been written arguing for or against various etiologies. However, the specific etiology of a behavior is irrelevant to the modifier of that behavior unless that etiological condition can be altered. Since the specific etiology of autism and similar disorders is unknown, two strategies of investigation are open. One is to investigate the causes of this disorder. The other is to investigate the effects of various strategies on the behaviors of a severely behavior disordered child. Both investigations are important.

It is impossible to compare the investigations of various aversive controls unless some agreement is reached as to which subjects are included. Children who are severely behavior disordered exhibit such behavior as abnormal responses to auditory and visual stimuli, lack of affect, lack of relationships with others, severe problems in language, mutism or delayed speech, echolalia, reversal of pronouns, self-stimulatory behaviors, and occasionally self-destructive behaviors. Many of these behaviors are also present in children who are severely/profoundly mentally retarded. It is often not possible to differentiate clinically between autistic or autistic-like children and those children who are severely and profoundly mentally retarded. When a specific classification was unknown or questionable, many researchers described the subject's behavior rather than used a specific label.

The effects of punishment are idiosyncratic. Therefore, any differences between subjects need to be considered. Group studies, with their pooled variance, focus on similarities. Individual studies allow one to focus on the

differences. It is the systematic investigation of these differences that often leads one to new information. It is important to know the effectiveness of punishment and under what conditions that effectiveness has been demonstrated. Another concern is that of generalizability. Does the behavior suppressed in one setting remain suppressed in other settings or with other people? Are new behaviors lost or reduced when the setting or teacher changes? A final concern is side effects or substituted behaviors. What is the evidence about the frequency, severity, and permanence of these behaviors? This paper reviews those studies which investigated the effects of various forms of punishment on the behaviors of severely behavior disordered children. It will identify the various factors that affect punishment procedures. Generalizability, maintenance, and side effects will also be discussed.

PUNISHMENT: TECHNICAL CONSIDERATIONS

There are many definitions of punishment and, unfortunately, many connotations. Punishment can connote a form of discipline of children, or of a criminal by society for a crime committed, or anything in between. Whenever a term has more than one common connotation, confusion about its meaning is likely to occur. When a term has also acquired emotional content to the extent that the term punishment has, confusion is liable to give way to disagreements, arguments, hostility, and conflicts. Far too many discussions of punishment focus on these emotional conflicts. Discussions rage without any attempt to clearly define punishment. When one analyzes these arguments it is evident that the combatants are talking about different things. As long as punishment remains a polymorphous term, no resolution is possible.

Punishment, in this paper, is defined as any stimulus that follows a behavior that decreases the probability of that behavior's recurring. The punishing property of any given stimulus can only be established empirically. Thus no stimulus can be assumed to be, or not be, punishing unless a specific functional relationship between a behavior and the stimulus has been demonstrated. Studies that demonstrated that relationship are the main focus of this paper. It is significant to remember, however, that a stimulus that has been shown to be a punisher to one individual does not necessarily act as a punisher to another.

A thorough treatment of the theory of punishment is beyond the scope of this paper. A rudimentary understanding of punishing stimuli is necessary, however, to be able to interpret the studies presented here.

Behaviorists assume that behavior is learned. A behavior is learned when a specific stimulus or class of stimulus produces a consistent response or class of response. This learning is a product of differential reinforcement of a specific response or class of response. The more frequent the reinforcement, the more rapid the learning. Many behaviors that are learned are maladaptive to a child. It is often necessary to reduce the frequency of such behaviors. (Cf. Rutherford & Neel, 1978, for a discussion of when and when not to use punishment.) The frequency of a behavior can be reduced in two ways: extinction and punishment. Extinction is the removal of all reinforcement for a specific behavior. Under such a condi-

tion the behavior will increase for a short time and then decrease until it no longer occurs. Punishment, on the other hand, is to follow a behavior with an aversive stimulus or the removal of a pleasurable stimulus. Under this condition, if the punishment is strong enough, the behavior will be suppressed as long as the punishment or the possibility of punishment exists.

In a laboratory setting (with animals), it is possible to create either of these two conditions: extinction and punishment. The two conditions produce different results. With extinction the behavior decreases to zero and does not recur unless it is reinforced. With punishment, however, the behavior decreases to zero until the punishment is removed, and then the behavior recurs and follows a pattern similar to that of extinction. When similar conditions are studied with humans, the results are not so clear. This is especially true with children who have severe behavior disorders. Ethical and safety considerations prevent the running of controlled studies with humans that would parallel animal studies. Often the human studies cannot show a functional relationship between the independent and dependent variable or they are unable to control the variables and vary more than one. Although this presents difficulties to researchers and theoreticians, much information can be gleaned from their efforts that will help in the education of severely behavior disordered children.

In order to organize this information, the studies will be divided according to the type of punishment they used: studies which presented aversive stimuli following a behavior; time-out studies; and, finally, the overcorrection procedures.

The Studies

AVERSIVE STIMULI

Contingent electric shock. Contingent electric shock (CES) is a mild electric shock following an undesired behavior. This shock is usually delivered by an inductorium (shock stick) or by a band that surrounds the arm or leg. CES has been used to increase desired behaviors, condition other stimuli, and reduce undesired behaviors of severely behavior disordered children.

The first study to report the use of CES was by Lovass, Schaeffer and Simmons (1965), who increased the approach behavior of two five-year-old schizophrenic twins. After 17 days of asking the children to come to an experimenter with no results, the researchers wired the floor of the experiment room with an electric grid. The children were again asked to approach the experimenter. If they did so in five seconds or less, there was no shock. This procedure markedly increased the number of times the children approached the experimenter. In this case, CES was a negative reinforcer for approaching the experimenter. (Cf. LeFrancois, 1972, for discussion of negative reinforcement.)

CES has also been used to condition other stimuli in the environment. Verbal reprimands are frequently used to punish children. With many severely behavior disordered children a loud "no" or "don't" has little or

no effect. Several investigators have tried to determine whether or not the pairing of CES with a verbal reprimand will condition the reprimand as an aversive control. Lovaas, Freitag, Gold & Kassorla (1965) were able to suppress tantrums with the word "no" after it had been paired with CES. Risley (1968) was also able to pair "no" with CES, but with less success, in his study of a six-year-old autistic girl who had a habit of climbing up on things. Risley tried a variety of techniques to decrease this climbing. He showed partial success with the pairing of verbal command and CES. CES alone, however, was more effective and will be discussed below. Lovaas and Simmons (1969) were able to effectively condition the verbal reprimand "no" by using CES with an eight-year-old autistic girl. This girl was self-abusive (biting). She stopped biting after the application of CES paired with the reprimand "no." When new experimenters were introduced into the setting her biting behavior remained suppressed. When she was moved to another setting, her biting returned, but was suppressed with the reprimand alone. This demonstrated that the conditioned effect of the verbal reprimand maintained itself in a new setting. No information was given on how long this effect persisted.

Even though CES has been used as a negative reinforcer (Lovaas, Schaeffer & Simmons, 1965) and as a reinforcer to condition verbal reprimands (Lovaas, Freitag, Gold & Kassorla, 1965; Lovaas & Simmons, 1969; Risley, 1968), the most frequent use of CES is to suppress severe disordered behaviors. CES has been used to suppress tantrums (Lovaas, Schaeffer & Simmons, 1965), self-stimulatory behavior (Lovaas, Freitag, Gold & Kassorla, 1965), dangerous climbing (Risley, 1968), rumination and vomiting (Lang & Melamed, 1969; Galbraith, Byrick & Rutledge, 1970; Lincheid & Cunningham, 1977), and destruction of an appliance (Bucher & King, 1971).

Lovaas, Schaeffer and Simmon's (1965) study of the negative reinforcing properties of CES, he also used CES to suppress tantrums and self-stimulatory behaviors successfully. Risley (1968) used the same procedure to reduce dangerous climbing. In both cases, it was necessary to administer the shock after every occurrence to gain total suppression.

In another study Lovaas and Simmons (1969) compared extinction to CES with two self-destructive boys (8 and 11 years old). Each boy was placed in a room for 90 minutes to determine whether or not his self-destructive behavior would decrease following an extinction curve. Lovaas and Simmons found that such a procedure would work, but each boy engaged in self-destructive behaviors at rates of 2700 and 900 per session respectively. This high rate was considered cruel and excessive, so another procedure (CES) was tried. Each child was shocked following each self-destructive behavior. Their rate of self-destructive behavior was reduced to zero. However, the behaviors were suppressed only in the presence of the experimenter who administered the shock. When experimenters were changed, additional administrations of the shock were required to suppress the behavior. For one of the children the same was true when the settings were changed.

The lack of generalization between settings or experimenters seems to suggest that a very restrictive and specific discrimination has been

learned. This presents problems in terms of generalizing the suppression of the conditioned stimuli to other stimuli found in the natural environment. This issue will be discussed in the section on maintenance and generalization.

Simmons and Reed (1969) used CES to eliminate self-abusive behavior of a five-year-old autistic girl. An extinction technique had been tried with no success. After the extinction sessions, the parents were asked to ignore the behavior. This reduced the rate, but not enough to prevent possible permanent damage. CES was tried as a third technique. Self-injurious behaviors fell to zero in two sessions. When the girl was sent home, the behaviors returned. CES was administered by the parents and the rate decreased to zero and remained near zero at five and eight months' follow-up. The parents reported that they periodically used shock to keep the behavior suppressed. These results are consistent with the other studies.

Corte, Wolf and Locke (1971) found similar results when they reduced self-injurious behavior of four adolescents in an institution. They also found that the suppression of self-injurious behaviors could be generalized to a setting unassociated with suppression if the behavior was secretly observed and then shocked by a hidden experimenter. Eleven shocks at random intervals were required to suppress the behaviors of an adolescent girl. This study suggests that after a behavior has been suppressed in a laboratory setting, a different set of procedures and schedule of punishment may be required to teach the amount of generalization necessary to maintain suppression of the behavior in the natural setting.

Tate and Baroff (1966) also investigated the effectiveness of delayed shock. They administered CES to decrease the self-injurious behavior of a nine-year-old autistic child in two different daily sessions. In the first session they administered the shock following every incident of self-injurious behavior. In the second session, they watched the child over a closed-circuit TV and administered a delayed shock after each occurrence. All self-injurious behaviors were eliminated within 147 days. The child was free from restraints for nine hours each day. This was still true six months later.

The staff was also able to modify other behaviors with just the buzzing sound of the shock device. It appears that the noise had become a conditioned aversive stimulus similar to the verbal reprimands in the study by Lovaas, Freitag, Gold & Kassorla (1965).

Merbaum (1973) replicated the results of Lovaas and others with a twelve-year-old autistic male who hit his face. CES was effective, and training the parent to use it in the home was necessary to maintain the suppression there. Yeakel, Salisbury, Greer and Marcus (1970) reported the successful use of an electrically wired head bonnet to reduce the head banging of a fourteen-year-old autistic male.

CES has also been used to eliminate vomiting and rumination in infants and children. Lang and Melamed (1969) eliminated rumination and vomiting in a nine-month-old boy in a hospital setting. Several alternatives had been tried before administration of the shock, including changes in diet, antinausea drugs, physical attention, and various feeding techniques. None of these techniques elicited any response. CES was tried as a last

resort to try to save the infant. There were no recurrences of rumination or vomiting at one, five, and twelve months.

Linscheid and Cunningham (1977) reported similar results. Their subject was also nine months old. After trying continuous maternal attention and a change in diet, investigators administered CES at the beginning of each incident. Rumination dropped from a mean of 114 to one by the third day. The authors then removed the shock to demonstrate a functional relationship and the mean number of incidents climbed to ten in three days. Shock was then reintroduced and the incidents decreased to zero and remained there until the patient was discharged. Follow-up at nine months showed that rumination was no longer occurring, even though there were several incidents in the first two weeks after the child went home. No CES was used at home. Although admirable from a research point of view, the use of a reversal technique to control for staff and ward differences seems indefensible. Linscheid and Cunningham could have strengthened their case by either replicating the procedures of Lang and Melamed or replicating their procedure with another patient.

Galbrith, Bryck and Rutledge (1970) reduced vomiting in a thirteen-year-old psychotic who weighed only 32 pounds. A shock apparatus was placed on the child for six days during a baseline. The child vomited an average of ten times per day. Within ten days of investigators applying CES the rate had gone to zero and the child began to gain weight. By the end of the study he had gained 45 pounds and weighed 77 pounds. Even though the vomiting was stopped, many other maladaptive behaviors continued. The CES treatment did not generalize to other behaviors.

CES was used with an eleven-year-old child labeled childhood schizophrenic (Bucher & King, 1971). In this case, as in others, several other techniques were tried first. Various combinations of reinforcement, ignoring, and structure were tried to increase the child's appropriate play and to reduce his destruction of a record player. These had varying degrees of success, but none of them reduced the child's destructiveness completely. CES was then used and the destruction ceased. The procedure generalized to new situations after CES was used in the second situation.

As can be seen, CES is effective with a variety of severe behavior disorders in the settings where it is used. There is some question as to whether or not it will generalize across experimenters and settings. It does seem to be immediately effective (or nearly so) even with behaviors that were not modifiable by other techniques. Side effects, generalization, and maintenance will be discussed later.

Three other aversive stimuli have been used to reduce behaviors of severely behavior disordered children. They are slaps, lemon juice, and loud verbal reprimands.

Physical reprimands. Marshall (1966) combined slaps and positive reinforcement for desired behavior to reduce bed wetting and soiled pants. Unfortunately the administration of the aversive stimulus was not systematically reported, so it is impossible to determine the effects of the slaps.

Saposnek and Watson (1974) used slapping in an entirely different way: they taught a ten-year-old autistic boy who slapped his head to slap an experimenter's hand. The boy slapped his head at a rate of 170 slaps per

minute in the baseline period. To prevent this self-abuse, the child was kept in restraints. In the first phase of the experiment, the child was placed on the experimenter's lap and the restraints were removed. Each time the child began slapping his head, he was required to slap an experimenter's hand until he stopped slapping. When he stopped slapping, he was reinforced for appropriate behavior. This procedure was then used on the ward where the child lived. In a third phase, the reinforcement was removed and only the slapping procedure was continued. There was a return to baseline and maintenance phases. The results showed that the procedure was effective (reduced slapping of head to zero for the one-hour sessions). When the procedure was moved to the ward, the results initially were a little less impressive, but quickly rose to the laboratory level (zero slapping in 60 minutes). When the baseline conditions were reinstated, the rate of head slapping increased markedly. When the procedure was reintroduced the rate decreased to one or two incidents per hour. A six month follow-up showed levels similar to the phase where there was hand slapping but no reinforcement.

This study, although it used slapping, is not a study that used aversive control per se. It is more like an overcorrection procedure.

Oral aversives. Lemon juice was given to a six-month-old girl who ruminated (Sajwaj, Libet & Agras, 1974). A small amount was put in the girl's mouth when her tongue began to move preceding rumination. Rumination was completely stopped.The child began to gain weight and continued to progress at the end of one year. This study is important because it demonstrates that rumination may be eliminated with milder aversive stimuli than CES. All the previous studies had failed to try any milder form of aversives. Instead, they tried a variety of positive techniques or drug therapies. When these failed, they used CES. An apparent conclusion would be to recommend the use of mild aversive control first before CES is tried. Unfortunately this recommendation is not borne out in the data. Many animal studies have shown that if the intensity of an aversive control is gradually increased, its effectiveness to suppress a behavior is diminished. Thus a gradual increasing of aversive stimulus intensity is not recommended.

Sajwaj and his associates (1974) do suggest, however, that aversive stimuli given orally may, in fact, be effective in some cases. This is encouraging in places when CES is forbidden or impossible.

Finally, the idea of presenting the aversive stimulus at the beginning of a chain of behaviors may have been Sajwaj's greatest contribution. The study of behavior chains has also proven successful with echolalia in autistic children (Freeman, Ritvo & Miller, 1975) and may very well be the next major area of research in reducing maladaptive behaviors.

Verbal reprimands. The use of verbal reprimands with severely behavior disordered children is limited. This may be because so few of these children reliably respond to verbal commands. Many times verbal reprimands need to be conditioned as an aversive stimulus by pairing them with a more powerful aversive stimulus (see Lovaas, Freitag, Gold & Kossorla, 1965; Risley, 1968; and Lovaas, 1969 for examples).

Koegel, Firestone, Kramme and Dunlap (1974) used a loud verbal "no" to suppress self-stimulatory behavior of two autistic children. The reprimand was paired with a slap or restraint. The children were also reinforced for appropriate play with praise and food. Although self-stimulatory behavior did decrease markedly (nearly 80% in both cases), it is impossible to determine which intervention caused which change. It is interesting to note that when the baseline conditions were reintroduced, the self-stimulatory behavior returned to the previous levels. Thus whatever part of the intervention package was suppressing the self-stimulatory behavior, it had no permanent effect. This could be for a number of reasons that are discussed below with respect to generalization.

Another combination study using verbal reprimands was conducted by Doleys, Wells, Hobbs, Roberts and Cartelli (1976). They were trying to reduce non-compliance with two autistic-like boys. After a baseline phase, they placed each child in a chair in the room for 40 seconds whenever the child failed to follow instructions. After returning to baseline, they then used an overcorrection procedure (positive practice) when they guided the child in appropriate play. In the final phase, after another return to the baseline condition, the experimenter grabbed the child firmly and reprimanded him in a loud voice for non-compliance. Both of the boys responded similarly. The first boy reduced his non-compliance by about 50% in both the time-out and positive practice phases. His non-compliance decreased 90% with the use of the reprimands. The second boy did not respond to time-out and only marginally (25% decrease) to positive practice, but reduced his non-compliance by 75% when the reprimands were in effect. When the reprimands were removed the first boy returned to near baseline levels. The second boy, however, reduced his non-compliance even further (90% decrease). The variability of the results and the compounding of the independent variables leads one to suspect the results. Most likely more than one variable accounted for the changes. There is some likelihood that the major cause(s) were related to the action of unspecified, and maybe unknown, variables.

EXTINCTION AND TIME-OUT

If a behavior is not reinforced, its frequency of occurrence will gradually decrease to zero. This process is called extinction (Skinner, 1953). Theoretically, one method of eliminating a maladaptive behavior is to remove all reinforcement for that behavior and let it extinguish. This procedure has been shown to be effective in a variety of animal studies (Skinner, 1953; Sidman, 1960). It has also been shown to be effective when applied to human subjects if the experimenter can remove all reinforcement. This is often difficult if not impossible when we deal with severely behavior disordered children for several reasons. First, the reinforcement for a specific behavior is often unknown. Further, there are some behaviors that seem to be reinforced by the subject himself and therefore are out of the control of others. A third situation occurs when the reinforcement is known, but it is impossible to remove it, or it is too dangerous to isolate the child in order to prevent the behavior from being reinforced.

It is very difficult to employ pure extinction procedures in the applied setting. Experimenters have found that combining removal from presumed reinforcement and a mild punishment is more effective. This procedure is called time-out. Time-out is the removal of a child from all reinforcement for a brief period of time when he has exhibited an undesirable behavior. It differs from extinction in that *no* behaviors are reinforced during the time-out period. Thus if a child were to emit a desirable behavior during the time-out period, it would go unreinforced also.

Several studies have used extinction, time-out, or combinations of time-out and differential reinforcement of opposite behaviors as an independent variable. They fall into three groups: studies that used extinction to prove that several maladaptive behaviors were under the control of external reinforcement; studies that investigate the various factors that affect time-out; and studies that show which behaviors have been modified with extinction, time-out, or a combination of procedures.

In an early study with autistic children, Lovaas, Freitag, Gold and Kassorla (1965) used extinction to demonstrate the effects of reinforcement on various behaviors. They were more interested in demonstrating that autistic children could be taught adaptive behaviors with the use of differential reinforcement. They also discovered that ignoring maladaptive behavior reduced the frequency of that behavior. This led to the investigations that showed that self-injurious behaviors were being maintained by external reinforcement in many cases (Lovaas, 1969; Tate & Baroff, 1966).

Tate and Baroff (1966) demonstrated that physical contact was one class of reinforcers that maintained self-injurious behavior in autistic children. Lovaas and Simmons (1969) showed that social attention was all that was required to maintain self-injurious behavior in the children he studied.

Even though investigators in all three studies used extinction as part of their investigation, they were not primarily interested in extinction or time-out as an educational procedure. Pendergrass (1971) found that a continuous schedule of contingent time-out was more effective than an intermittent schedule. He observed a five-year-old severely involved girl in a classroom setting. Intermittent time-out of five and twenty minutes was not effective in changing behaviors from those of the baseline conditions. When the time-out was changed to a continuous five-minute schedule, the behavior was markedly reduced. After the reduction was achieved, the time-out was discontinued and ignoring the behaviors was tried. Within three days the hits had increased to the baseline levels. Time-out was reintroduced, and the behavior again declined. This was repeated again with the same results.

This study points out two major factors of time-out procedures. First, the study demonstrates that time-out is a punisher rather than just the absence of reinforcement (i.e. it served to suppress the behavior). Pendergrass also showed that, in this case, continuous scheduled use of time-out is more effective than an intermittent schedule. This coincides with other punishment studies that show continuous schedules are more effective. (Cf. Honig, 1966, for a more complete discussion.)

Solnick, Rincover & Peterson (1977) used a time-out procedure every time an autistic girl threw a tantrum. Each time the girl was isolated she began self-stimulating. The surprising results were that the girl's tantrums increased during the experimental phase. Solnick, Rincover & Peterson reasoned that if the time-out condition was more reinforcing than the time-in condition (when the child was being asked to perform a task), then the time-out procedure would serve as a reinforcer for maladaptive behavior. To test this hypothesis they conducted a second study with a sixteen-year-old male. In this study they observed that the effectiveness could be increased if the reinforcing properties of the time-in condition were increased. Thus, the difference in reinforcement between the two conditions is a critical factor to be considered before the decision to use time-out is made.

Sometimes it is impossible to alter the reinforcing properties of the time-out condition. Examples would be when the child engages in self-stimulatory or masturbatory behaviors (cf. Azrin, 1973). Solnick et al. (1977) also showed that restraint of whatever part of the body is being stimulated can reduce the stimulation. This procedure is similar to one aspect of overcorrection and will be discussed further in that context below.

Time-out has been shown to be effective in reducing tantrums (Wolf, Risley & Mees, 1964), throwing objects (Wolf, Risley, Johnson, Harris & Allen, 1967), self-injurious behavior (Tate & Barloff, 1966; Peterson & Peterson, 1968; Jones, Simmons & Frankel, 1974), aggression towards others (Wolf, Risley, Johnson, Harris & Allen, 1967; Sloane, Johnston & Bijou, 1967; Drabman & Spitalnik, 1973; Bostow & Bailey, 1969), and fantasy (Sloane, Johnson & Bijou, 1967). Wolf, Risley and Mees (1964) were able to reduce tantrums of a 3½-year-old autistic boy by placing the child in a time-out room. As the child's behavior improved, the criterion for tantrums was made more stringent. In 70 days all severe tantrums were eliminated, and all tantrums were eliminated in 130 days. This procedure was possible because the experimenters were able to let the boy have tantrums without attending to him for 130 days. In such cases, it appears that time-out is as effective as other aversive procedures, although not as fast.

Wolf et al. (1964) used this procedure to reduce throwing of glasses and food. In each case, the time (number of days) necessary to eliminate the behavior decreased. The parents were also able to control the child's behavior after the time-out procedure was introduced in the home.

Two years later, the boy was enrolled in an experimental preschool. He began slapping and pinching other children. The staff's ignoring these behaviors was ineffective, so a time-out procedure was reintroduced (Wolf, Risley, Johnston, Harris & Allen, 1967). The behavior was eliminated after the use of a few (three for slapping, one for pinching) time-outs. The procedure was even more efficient than it had been in the previous study (Wolf et al., 1964).

Sloane, Johnston, and Bijou (1967) combined time-out and differential reinforcement of an opposite behavior to reduce aggressive acts and fantasy behavior of a 4½-year-old autistic child. It is impossible to deter-

mine whether it was the differential reinforcement, the time-out, or the combination that was the critical variable in this study. The findings of Solnick et al. (1977) seem to indicate that the combination approach is most likely the most effective of the three.

Peterson and Peterson (1968) report similar results. An eight-year-old boy would hit himself whenever his favorite blanket was removed. Initially, the authors reinforced the child for every three to five seconds of no hitting. The rate of hitting did decrease below the baseline level, but remained at an unacceptable level and quite variable. When a time-out procedure was added to the reinforcement procedure, the behavior decreased to zero. It is unclear, however, what role the blanket played. It may have become the discriminant cue for reinforcement, and removal of it may have served as the cue to begin the self-injurious behavior. In any case, this study adds further evidence to the superiority of a combination procedure.

Bostow and Bailey (1969) also reduced the aggressive attacks of a seven-year-old boy by combining a two-minute time-out period with positive reinforcement for periods without aggression. When the time-out was removed, the rate began to climb to baseline levels. The reintroduction of the time-out combination eliminated the aggression.

Being out of seat and aggressive behaviors of 15 patients of a psychiatric institute were also reduced by time-out (Drabman & Spitalnik, 1973). The boys were nine to eleven years old. The time-out period was ten minutes. The behaviors were reduced ⅔ in 16 days. The behaviors returned to near baseline levels when time-out was stopped. In this case, time-out was not paired with reinforcement of another behavior, and it served only as a suppressor.

In all the studies reviewed above, time-out was contingent upon a child's emitting an undesired behavior. Jones, Simmons and Frankel (1974) used a non-contingent time-out procedure to reduce self-injurious behavior in a nine-year-old autistic child. This study is interesting for a number of reasons. The girl, Elaina, was the same girl who was reported in the Simmons and Reed (1969) study above. Elaina was first treated when she was 3½ years old for self-abusive behavior (hitting herself in the mouth). Contingent electric shock was used to eliminate this behavior in the laboratory setting. When she was five years old she was treated in the institution again because the self-injurious behavior had returned. Simmons and Reed reasoned that the maladaptive behavior recurred because it had been reinforced in the home environment. They again reduced the behavior to zero in the laboratory and then used the same procedure in the home to insure generalization. The parents were able to carry out the procedures effectively and the behavior was again eliminated. Four years later, however, the behavior had again risen to the original levels and the parents were concerned about Elaina's safety.

Jones and his colleagues began by trying differential reinforcement of other behaviors. The child was restrained on the ward and released for a short period of time. She was reinforced for non-self-injurious behaviors. This was unsuccessful. Then conditional electric shock was employed. CES was found to be reinforcing and actually increased the self-injurious behaviors. For some reason, Elaina had adjusted to CES.

They then tried two 2-hour, non-contingent time-out sessions daily. During these sessions, the child was placed unrestrained in a lighted room with several toys. She was observed continuously through observation mirrors. The behavior reduced to zero by the twelfth week. After the behavior was eliminated the length of time in isolation was gradually reduced and there were no recurrences of the behavior in the room or on the ward. The isolation sessions were completely eliminated by the fifty-ninth week. The maladaptive behavior did not recur again until the seventy-second week. The isolation session was reinstituted and the behavior decreased to zero by the seventy-seventh week. Unfortunately, at that time Elaine was administered a psychotropic drug and data collection was stopped.

Non-contingent time-out worked in this case, when all else had failed. It is a slow process, but the results were generalized to another setting without a specific transfer of the procedure to that setting. It must be assumed that the behavior recurred at a high rate because it was reinforced in the ward setting and because no new behavior had gained sufficient strength to replace it.

This study suggests new avenues to investigate in the reduction of maladaptive behaviors and in increasing the generalizability of the results. As noted earlier, the discrimination learned when CES is used is highly specific and therefore not readily susceptible to generalization. CES is also most assuredly a behavior suppressor. It is expected, therefore, that the maladaptive behavior will recur when the punisher is no longer present. The results of Jones et al. indicate a more promising approach that definitely warrants further investigation.

OVERCORRECTION

Overcorrection is a procedure that has been developed by Azrin, Kaplan and Foxx (1973) to reduce various behaviors. The procedure consists of (a) verbal warning to stop engaging in the maladaptive behavior, (b) physical stopping of the behavior, (c) forced practice of an appropriate behavior, and (d) release from forced practice. According to its originators, overcorrection has two functions: to suppress the undesired behavior and to teach and reinforce a more appropriate behavior (Azrin, Kaplan & Foxx, 1973; Foxx & Azrin, 1973). This procedure has been used most often with severely retarded individuals (Azrin, Kaplan & Foxx 1973; Azrin & Wesolowski, 1974; Foxx & Azrin, 1972; Foxx & Azrin, 1973; Henriksen & Doughty, 1967; and Kelly & Drabman, 1977). It has been used a few times for the control of self-stimulatory behaviors of autistic children (Epstein, Doke, Sajwaj, Sorell & Rimmer, 1974; Foxx & Azrin, 1973; Wells, Forhand, Hickey & Green, 1977).

Epstein, Doke, Sajwaj, Sorell and Rimmer (1974) were able to reduce hand and foot movements in a five-year-old boy labeled schizophrenic. They found that guiding the child through a specific set of hand movements every time he engaged in self-stimulatory behavior reduced the behavior to zero. They used a similar set of foot movements to reduce self-stimulatory movements of the foot. They were also able to reduce inappropriate vocalizations by using hand movements.

Similar results were reported by Foxx and Azrin (1973). They eliminated self-stimulatory hand flapping in a seven-year-old autistic girl by guiding her through a series of hand movements. After the behavior was eliminated, the threat of the overcorrection procedure was sufficient to suppress the behavior for the remainder of the time reported in the study. One must wonder, however, whether or not the warning would retain its conditioned property without the investigators' reinstituting the overcorrection procedure.

Wells, Forehand, Hickey and Green (1977) used guided playing with a toy to reduce the mouthing and self-stimulating behavior of two autistic boys. They used a multiple baseline design to measure the differential effects of overcorrection on several behaviors. They found the technique to be effective only if it was employed for each new class of behavior. There was no apparent generalization.

All three studies indicate that overcorrection operated as a punisher in these cases. It does not generalize to new settings or new behaviors. Additionally, there is no evidence that the effects remain when the procedure is removed. Long-term studies in this area are lacking. If overcorrection does not produce results that are lasting and readily generalizable, then it is just another form of aversive control that can be added to the list of aversive controls above. Such a judgment must be withheld until more studies have been completed.

GENERALIZATION AND MAINTENANCE

One reason that the maladaptive behaviors of severely behavior disordered children are so resistant to change is that the behaviors are so successful. They are highly reinforced. They are reinforced by a large number of people and a variety of settings. They can also serve as a negative reinforcer for maladaptive behavior by allowing a child to escape an unpleasant situation or terminate an unpleasant activity. Because they are generalized to a large number of stimuli, they are not easy to replace. Because these children have learning problems, it is difficult to teach them competing responses. It is often necessary to suppress the maladaptive behavior in order to be able to introduce and strengthen a competing response. What effects does the introduction of a punishing stimulus have on a child's behavior? How lasting is the result? How generalizable is the result across behaviors, people, and settings?

The introduction of an aversive stimulus causes a child to learn a specific discrimination. If the stimulus is very powerful, such as CES, then the discrimination is very specific, usually to one behavior, person, and setting. Several studies have demonstrated that generalization across settings, people, or behaviors is not automatic (Clark, Rowbury, Baer & Baer, 1973; Epstein, Doke, Sajwaj, Sorell & Rimmer, 1974; Lovaas & Simmons, 1969; Merbaum, 1973; Risley, 1968; Sailor, Guess, Rutherford & Baer, 1968; Wolf, Risley & Mees, 1964; and Wells, Forehand, Hickey & Green, 1977). Lovaas and Simmons (1969) and others have shown that generalization may occur if more than one experimenter and more than one setting are used. Corte et al. (1971) found that random use of punish-

ment when the subjects did not know they were being watched also facilitated generalization.

Those studies that were successful in pairing a severe aversive stimulus with a more common verbal reprimand or a mild time-out also reported more success at generalization (Foxx & Azrin, 1973; Jones, Simmons & Frankel, 1974; Lovaas, Schaeffer & Simmons, 1965).

In other studies, if the child was able to receive a lot of reinforcement for competing behaviors after the maladaptive behavior was suppressed, then the maladaptive behavior failed to reappear. This is especially evident in the studies that eliminated rumination and vomiting (Lang & Melamed, 1969; Linscheid & Cunningham, 1977).

Conditioned stimuli seem to work for some time, but usually require infrequent pairing with the unconditioned stimuli. This was true in many of the CES studies (Lovaas & Simmons, 1969; Lovaas, Schaeffer & Simmons, 1965; Risley, 1968), and in the extinction study by Jones et al. (1974) where the behavior recurred after 72 weeks. This is probably a result of extinction of the conditioned stimuli and the failure of other behaviors to gain enough strength to be maintained in the environment. Lovaas, Koegel, Simmons and Long's (1973) follow-up study where they tried to teach language to six autistic children demonstrated how difficult it is to develop and maintain such a set of competing behaviors.

More work is needed to study what factors enhance or inhibit generalization and maintenance. Only a handful of studies have attempted to isolate the variables that may affect these two processes (Epstein, Doke, Sajwaj, Sorell & Rimmer, 1974; Lovaas & Simmons, 1969; Risley, 1968; Wolf, Risley & Mees, 1964; Wells, Forehand, Hickey & Green, 1977). With more and more questions being raised about the validity of punishment as an educational tool, it is extremely important that strategies that increase maintenance and generalizability be studied in more detail.

SIDE EFFECTS

No paper on punishment would be complete without a discussion of side effects. Many papers have decried the use of punishment because of the possible side effects. Originally, the discussion centered on symptom substitution and the question of whether or not the educators were attending to the "real" problems (See Ullman & Krasner, 1965). Lately the discussions have focused on the side effects of major aversive stimuli, especially CES. No attempt will be made to recount the arguments here. Suffice it to say that there *are* several side effects of aversive stimuli. Some are positive, some are neutral, and some are negative. They can be short or long term. They are often unpredictable. Because this is true educators of severely behavior disordered children are left with a value judgment every time they ponder the decision of whether or not to use punishment. Until more is known about how to increase appropriate behaviors and decrease inappropriate ones, this will always be the case. The critical question is which behavior is the most negative and for how long. Is blinding by self-mutilation more severe than CES? Probably so. Are there other techniques that would be as effective or even more effective in the long run? This question can only be answered empirically. Lichstein and Schreibman

(1976) discuss the questions of side effects in their review of the use of electric shock with autistic children. A summary of their findings is presented below. (See Table 1)

Their findings indicate that most side effects are either minor or temporary. Nevertheless, they must be considered when deciding to use punishment. The decision is difficult and predicated on many variables. Each experimenter and educator must weigh the pluses and minuses for himself. (See Lichstein & Schriebman, 1976; Bucher & Lovaas, 1971; or Rutherford & Neel, 1978, for a more complete discussion.)

Conclusions. Punishment works, for a time. The literature strongly supports the effectiveness of punishment in the short run. If, however, a new set of adaptive, competing behaviors are not taught, then the effectiveness of the punishing strategy will diminish or disappear. This is so even if the aversive is CES.

How will these new behaviors be learned? The evidence of successful learning of new behaviors by severely behavior disordered children is disappointing. Many children have "learned" behaviors in a highly structured setting that is rich in cues, prompts, and reinforcement. Many of these same children have "unlearned" these same behaviors when they were returned to their original environments. If so little success has been obtained in teaching competing behaviors, then what role should punishment play in the education of severely behavior disordered children?

Punishment should be used to prevent permanent or semi-permanent damage to a child. It is totally unjustified to allow a child to injure himself when relatively safe procedures can be used to prevent it. Often children are placed in restraints to prevent injury. When a child is restrained, there are no adaptive behaviors possible. Thus there are no opportunities to reinforce. It is no wonder that these children do not learn new behaviors. In these situations, appropriate use of punishment is justified.

Punishment may also be used in less severe situations. The reduction of self-stimulatory behavior is one example. Aversives, time-out, and overcorrection have been used to suppress this behavior. After suppression of self-stimulatory behavior, the task is to teach a competing behavior. Unfortunately, the two procedures are not paired. All too often the punishment program and its success are viewed as an end in and of itself. The experimenters judge success as the suppression of the maladaptive behavior. The assumption is that the behaviors will remain suppressed regardless of the success of programs that teach competing behaviors. The literature does not support this assumption.

Learning new ways to increase adaptive behaviors is essential. Further study of the processes of acquisition and generalization of new behaviors by severely behavior disordered children needs to begin. Often when a punishment procedure is ineffective or when a maladaptive behavior recurs, the punishing stimulus is intensified or changed. Attention needs to be given to the programs that increase competitive behaviors as well. Research needs to be started that investigates the connection between suppression and acquisition of new behaviors. These efforts are necessary not only because education is the business of increasing adaptive behaviors, but also because punishment works, *but only for a time*.

TABLE 1

Positive and Negative Side Effects of Electric Shock on Autistic Children Reported in 10 Studies.

Study	Side effects	
	Positive	Negative
Baroff and Tate (1968)		1. fear of buzzing sounds (+)[a]
Birnbrauer (1968)	1. sociability (+) 2. cooperation (+)	
Bucher and King (1971)		1. fear of shock device (+) 2. quietness (+) 3. sullenness (+)
Bucher and Lovaas (1968)	1. eye-to-face contact (+) 2. imitation skills (+)	1. aggression (+) 2. crying (+) 3. shivering (+)
Lovaas et al. (1965)	1. alertness (+) 2. affective (+) 3. sociability (+) 4. happiness (+) 5. pathological behaviors (−) 6. affection-seeking behaviors (+)	1. happiness-contentment (−)[b] 2. dependency (+)
Lovaas and Simmons (1969)	1. avoiding social contacts (−) 2. whining (−)	
Merbaum (1973)	1. sociability (+) 2. quietness (+) 3. happiness (+)	1. fear of shock device (+)
Risley (1968)	1. eye contact (+)	1. chair climbing (+)
Simmons and Lovaas (1969)	1. affection (+) 2. eye contact (+) 3. smiling (+) 4. hugging (+)	1. temporary aversion to experimenter (+) 2. aversion to shock stick (+)
Tate and and Baroff (1966)	1. calmness (+) 2. smiling (+) 3. sociability (+) 4. playfulness (+) 5. whining and crying (−)	

[a]The + denotes an increase in the behavior.
[b]The − denotes a decrease in the behavior.

Note. From "Employing Electric Shock with Autistic Children: A Review of Side Effects" by K. L. Lichstein and L. Schriebman, *Journal of Autism and Childhood Schizophrenia*, 1976, *6*, 163-173. Copyright 1976 by the Journal of Autism and Childhood Schizophrenia. Reprinted with permission.

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Developmental Programming for the Use of Aversive Procedures in a Hospital School

Steven R. Forness
UCLA Neuropsychiatric Institute

Developmental programming for aversives is a concept which has largely evolved over the past ten years in the classrooms of the UCLA Neuropsychiatric Institute (NPI) School. To put this experience in context, it should be pointed out that the NPI is part of a large urban medical center, that it is a university teaching hospital, and that the length of treatment for most of the patients averages around four to five months (with a range from one month to a year). This means that some of the problems of the NPI staff are very different from many of those encountered in long-term residential institutions where patients may remain for a matter of years and where return to community settings may not be an immediate goal.

The patient population of the Neuropsychiatric Institute includes some 60-70 children at any one time who are hospitalized on four children's wards. Each ward has 15-18 beds. One ward is for very young children with developmental disabilities, usually autism or mental retardation. A second is for children with psychiatric disorders. A third is for adolescents with developmental disabilities, and the fourth is for adolescents with psychiatric disorders. All children are admitted primarily for extended observation and/or short-term treatment of behavioral or emotional problems. Most have had significant school problems prior to admission.

Of the child's total day at the NPI, only three hours are spent in school. Two more hours are spent in rehabilitation programs (occupational, physical, and recreational therapy) with the remainder of the child's day spent on his ward. On the wards each child has his own therapist, usually an advanced resident in child psychiatry who rotates on a ward for six months and carries three or four patients at one time. The resident may see the child in individual, group or family therapy from one to four times per week. Usually there are five to seven nurses on each eight-hour shift, and each nurse may have two to three children for whom he or she has primary responsibility. While the purpose of this paper will be to report primarily on the use of aversives in the NPI School classrooms, an attempt will be made to point out the parallel use of aversives on each of the wards as well, especially when this conflicts with their use in the school setting.

Teachers in the NPI School attend weekly ward meetings and are considered part of the interdisciplinary treatment team together with psychiatrist, nurse, social worker, psychologist, and rehabilitation therapist. They also provide reports for the medical record on each child's school

progress, so that ward staff and therapists can compare their observations of progress in other hospital settings. Children are placed in classroom programs not on the basis of psychiatric or medical diagnoses, but on the basis of their level of readiness for classroom functioning. Initial assessment of readiness is made through evaluation of each child's prior school experience, by tests of developmental levels or academic achievement, and by observation of the child's classroom performance during his first few days of hospitalization. The school is on the seventh floor of the hospital, and children are brought to the school by nursing staff. There are two hours of school in the morning and an hour in the afternoon.

Operationally, there are four units in the NPI School. The *early childhood program* contains approximately 16 children who are two to eleven years of age but who are functioning at developmental or readiness levels characteristic of kindergarten or preschool children. Diagnostically, these children can be termed mildly or moderately retarded, autistic, seriously emotionally disturbed, or aphasic. All are grouped and regrouped at each period according to their individual levels in language, gross and fine motor skills, socialization, and cognitive skills.

The *elementary program* contains approximately 18 children from six to twelve years of age. These children are placed in one of two classrooms: a "preacademic" class for children functioning at the first to third grade level who work individually in a group setting with a token reinforcement system, and an "academic" class for children at the fourth to seventh grade level who often work as a group and who can function without the aid of a token reinforcement system. Some of the children in the latter group are able to be placed in regular classrooms upon discharge. There are mildly retarded, learning disabled, and disturbed children in both classrooms.

The *interim program* contains approximately 16 adolescents who work on individual lessons in a group setting with a point system as reinforcement. Academically, they function at the elementary grade levels. A few are moderately retarded but most are either mildly retarded or severely learning disabled.

The *secondary program* contains approximately 18 adolescents capable of junior high or high school achievement levels. They work on individual lessons and move between two classrooms throughout the day: an English/social studies class and a math/science class. They work without the aid of token reinforcement systems and plan their own academic programs with the aid of a teacher. Most are capable of regular high school enrollment upon discharge. More extensive descriptions of the school have been published elsewhere (Langdon, 1974).

It is in this hospital school context that the developmental use of punishment is described. This description begins with one aspect of the school program considered critical in the consideration of any punishment procedure.

IMPORTANCE OF ANTECEDENT EVENTS IN THE USE OF PUNISHMENT

Although other members of the interdisciplinary team may carry the primary responsibility for direct treatment of the child's social and emo-

tional problems, the hospital teachers are involved in such treatment, consistent with the goal of preparing the child for functioning in a classroom setting. Teachers set specific behavioral goals for each child in their classroom based not only on the teacher's initial assessment of educational readiness, but also on psychiatric or medical treatment goals for the child derived by the interdisciplinary team.

A critical rule in the NPI School and one that is suggested by the literature as well (cf. MacMillan, Forness & Turnbull, 1973), is that effective use of punishment for maladaptive behavior depends very highly on what might be termed "antecedent" events. In the NPI School, antecedent events are defined in a very particular way. In preparing children to return to a community or public school setting, each child is seen as functioning simultaneously on five continua or hierarchies of readiness: (1) developmental or curriculum level (2) types of materials needed (3) specifications for input and response mode (4) type of classroom setting needed and (5) level of motivation. These are described in some detail elsewhere (Forness, 1977).

Curriculum or developmental level refers to the assessment of each child in several areas of development and/or in the various academic subjects to determine as precisely as possible where that child is functioning. Related to that, an attempt is made to gauge the child's response to the particular type of activities or materials which might be available to teach a child at that developmental or curriculum level. In addition, the choice of materials and activities is related as much as possible to the child's proficiency in receptive and expressive language or to whatever visual and auditory perceptual problems the child may have. Consideration is also given to the type of instructional setting needed, ranging from one-to-one all the way up to large classroom groups. Finally, an attempt is made to assess the level of reinforcing consequence which the child may need to keep himself involved in the task, ranging all the way from edible, token, or social reinforcement up through task completion as an internally reinforcing event (Forness, 1973).

In relation to the use of punishment, all the possibilities of the five antecedent areas are exhausted before consideration is given to the *sixth* continua: level of aversive needed. The term, antecedent events, used in this way means nearly the same as it does in the behavior modification literature. There is an early Russian study which will illustrate this. In 1930, Krasnagorski, working in Pavlov's laboratory, was able to demonstrate the development of a neurosis under laboratory conditions. A six-year-old boy was trained to give a motor response to a metronome beat of 144 per minute and to inhibit response to a beat of 92. However, as the difference between the metronome beats was decreased, the subject began to show emotional responses, disliked coming to the laboratory, and eventually became disobedient, cried, became overexcited, and even went to sleep. When the differential was increased and the beat was lowered to 120, a stimulus to which the boy had responded earlier, he no longer seemed able to respond. Only when the beat was lowered to 92 was he able to relearn the response. The discrepancy between the child's capacity to respond and the

demands of the environment appeared not only to explain the development of the disorder but served to explain the development of classroom behavior disorders as well.

If the boy had been given a task which fit his functioning level, he might not have exhibited behaviors which could have at some point elicited punishment from a teacher. More recently, White (1958) and Bruner (1971) have suggested a similar notion.

These authors draw principally from the work of Piaget and suggest that when a child encounters a situation that is somewhat different from those that he has experienced previously, the child is motivated to discover the source of the discrepancy through observation or manipulation. If the discrepancy is too great, the child may become frustrated, bored or disinterested and not motivated to resolve it; if the situation is too similar to those that he has experienced already, he also may not be as compelled to engage in the task. Many theorists recommend a novelty factor that is sufficient to challenge but not too great to discourage the child and lead to avoidance responses.

In other words, one can (and *should*) go a long way in avoiding the use of punishment, if the demands on the child have been structured in an optimum fashion. If the staff has assessed the child's developmental level, picked the correct materials, presented them in a mode which does not unduly frustrate the child, in a setting which allows the child to function as much as possible with other children while still meeting his needs for attention and supervision, and has selected a minimal but still effective level of reinforcement, only then should punishment be considered, if disruptive behaviors still persist.

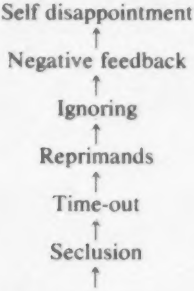
These conditions are an *essential* preliminary to any discussion of punishment procedures. Too often, teachers (including at times, the staff of the Neuropsychiatric Institute) use a punishment procedure for behaviors which they themselves may have unwittingly helped to elicit or for which some other manipulation of the learning environment might have been sufficient. While no one can claim that such careful attention to antecedent events is an easy task, the child deserves to have these considered punishment procedures carefully planned.

THE PUNISHMENT HIERARCHY

Even after the staff of the NPI is satisfied that it has developed an optimum learning environment for a child's needs, certain maladaptive behaviors may still remain. Indeed, most of the child patients of the NPI are hospitalized precisely because ordinary manipulations of the school or home environment have not diminished the child's behavior problems.

At the NPI the decision to use a particular punishment procedure takes place within the context of a punishment hierarchy. This hierarchy or continuum of aversives has been discussed in detail elsewhere (MacMillan & Forness, 1973; MacMillan, Forness & Trumbull, 1973; Forness, 1977). It suggests a progression of aversives which proceeds from the severe and

externally administered to the mild and internalized, as outlined below:



The thrust of this continuum is developmental, in that it moves in the direction of more mature motivational processes. At the top is the type of aversive which obviously reflects a high level of intrinsic motivation ("aversive" is used here in the behavioral sense, as an event which tends to decrease the frequency of a behavior which it follows). Negative feedback, just below it, is also at a relatively high level. Although both levels are somewhat dependent on feedback from external sources, they are still transactions essentially between a child and his sense of his own performance, even if it is the teacher who is telling him that he got a problem wrong or that his being out of seat is not permitted.

It is at the point where the teacher intervenes in a more systematic manner by ignoring, reprimanding, or using time-out or seclusion procedures that the more traditional sense of punishment derives. The important point, however, is that use of these lower order aversives should continually be viewed as a means of helping the child to develop to a level where intrinsic motivation is possible in most situations. This conceptualization is motivated by the same spirit as the concept of "least restrictive environment" in Public Law 94-142, providing *only* those restrictions to the child's movement which are necessary to maintain the child's progress while at the same time moving in the direction of a normal developmental course. Some case studies are illustrative of how this is done, beginning at the bottom of the hierarchy.

SECLUSION

Seclusion in the NPI hospital takes one of six forms, increasing in severity. A distinction is made here between seclusion and time-out, in that seclusion involves placing the child in a secluded room and time-out involves removing the child from the immediate situation but not necessarily placing him in seclusion. Both are technically forms of time-out (cf. Gast & Nelson, 1977) but one is obviously more restrictive and often (but not in every case) presumes a lower level of self control on the part of the child. An example where one boy progressed through all six might serve to illustrate. The boy was a nine-year-old referred for aggressive behavior at school and home. He had a history of parental abandonment and rejection and was ultimately placed in a residential school upon discharge from the

NPI hospital because of his home situation. He was placed in the academic elementary classroom upon admission. Although he was functioning at grade level, his classroom behavior was characterized by severe fits of temper and aggression directed towards peers and teachers. At one point, he slammed a classroom door on a teacher's finger, breaking it in two places. These outbursts, while not always predictable, were often related to episodes of real or perceived rejection.

There was a two-week "honeymoon" period after admission, during which the boy showed no aggression. At that point, minor aggressive acts and temper outbursts began to appear and were primarily directed towards peers with little apparent provocation. Normal manipulation of an individualized educational program, social and token reinforcement, plus ongoing therapy did not appear to have diminished these outbursts in the first month after admission. Initial attempts at "passively" ignoring these behaviors (acting as if the act had not occurred and directing the boy back to his work) and reprimands (e.g. "We don't hit.") with or without redirection ("If Tommy did something to you you don't like, you can *tell* him or tell me and I'll deal with it.") did not seem effective.

The first level of seclusion (study room seclusion) involved use of a small room in the classroom. Most classrooms in the NPI school have two small back rooms, each approximately four by four feet. One is identified as a quiet study room and the other is a time-out room. On those occasions when the boy came into class and looked to be anxious or upset, the teacher was more "on guard" and could often anticipate that negative peer interaction would lead to subsequent aggressive outbursts. At the first sign of such negative interactions, the boy was asked if he needed "to go in the back room" (the study room) to finish his work. If the boy complied, no further intervention was initiated. The boy was allowed to return to class when his assignment was completed or when the period ended. Generally the punishment literature (cf. other papers of this conference and MacMillan, Forness & Trumbull, 1973) tends to support this use of a mild aversive when used early in an episode of maladaptive behavior. More severe forms may have to be used after the episode has gotten underway.

While this worked momentarily, there were times when the boy either refused to go to the study room or when the behavior quickly escalated to physical aggression before the teacher could intervene. At this point, the second or third forms of seclusion were used, warning and unlocked seclusion. In the former case, the teacher used a time out "warning" (e.g. "Do you need to go into the time-out room instead?"). If that worked and the boy desisted and went to the back room, no further intervention was needed. If it didn't or if physical aggression had already occurred, the boy was directed to the seclusion room (e.g. "Go to time-out."). If he complied, he remained there for five-to-ten minutes and then returned to classroom activities. The door to the seclusion room was left unlocked or slightly ajar as long as the boy remained quietly in seclusion and caused no disruption.

The fourth level (locked seclusion) was used if the boy did not go voluntarily to the seclusion room or if he caused disruption (e.g. opening the door or yelling) while in time-out. In this case, the boy was usually in the

time-out room for the remainder of the period, usually a five-to-twenty-minute period of seclusion. If the boy was not quiet for the last two minutes, two more minutes were timed from the end of the last disruptive outburst before he could return. A "debriefing" session was held *after* the seclusion, in which the teacher discussed alternate ways in which the boy might deal with his feelings. This form of seclusion was necessary several times per week during the second month of the boy's hospital stay.

The fifth level (ward security room) was used if the boy's behavior in seclusion (e.g. kicking the door or yelling) was repeatedly disruptive to the classroom or if the boy committed an act of *violent* aggression against a child or a teacher. In this instance, the teacher or the assistant teacher escorted the boy to the ward and he was placed in the seclusion room on the ward (called a "security room"). He remained there until calm, at which point he was allowed to return to his room on the ward until the next scheduled activity outside of school.

In some cases, depending on the seriousness of the infraction, he was excluded from school for a 24-hour period. During this sixth level (exclusion), he attended all activities except school. During school hours, he remained alone in his room. At the end of the 24-hour period, he had to report to the school principal where the classroom rules were explained to him, where alternate ways of dealing with his anger were discussed and where alternative means of expressing his anger in the situation were role-played. The boy was required to do this before he could return to class. This occurred several times during a subsequent two month period. Eventually his behavior began to improve and milder forms of seclusion, time-out, and other interventions were increasingly able to maintain the boy's behavior.

A brief comment should be made concerning seclusion as used in this and similar cases at the Neuropsychiatric Institute. A cardinal rule in its use was that a corresponding effort should be made by the teachers *to increase their level of positive interaction* with the boy during the times he was behaving appropriately, *particularly* during the time the seclusion program was in effect. This served to heighten the reinforcing aspects of the classroom and maintain the aversive effects of seclusion. Whenever possible, "debriefing" sessions were used later in the class period or after class in which role playing, modeling, redirection and other teaching techniques were used to instruct the boy in appropriate ways of dealing with his anger. The effectiveness of this concurrent strategy of teaching alternatives to the punished behavior, is also supported in the literature (cf. MacMillan, Forness & Turnbull, 1973). The experience of the NPI staff has also been that, for younger elementary and particularly for preschool-aged children, much *shorter* seclusion periods are needed, usually two to five minutes.

Finally, the importance of the cooperation of the nursing staff should be noted. Their willingness to assist and to cooperate in the procedure by minimal intervention or verbalization with an angry child was not always easy in a psychiatric hospital ward in which such episodes are seen as the primary occasions for therapeutic intervention. This use of the ward staff was analyzed in a study by Forness, Esveldt and Jacobs (1971). It was found that 82 incidents of excluding of children to the ward occurred over

an eight-week period in all classrooms in the school. It was noted, however, that only two elementary-aged boys accounted for nearly half of all such incidents. It should also be pointed out that nearly two-thirds of the children arrived on the ward under self control and were *not* put in the security room, but given a chair restriction or sent to their room directly. Teacher ratings indicated that almost 90 percent of the children involved returned to their classrooms in an improved condition.

As an aside, it was also noted that most incidents occurred in the elementary classrooms and occurred during the first 15 minutes of each class period. There was a dramatic decline in the number of incidents from Tuesday (the high point) to Friday, a day on which an average of less than one incident occurred. This kind of data enabled the staff to look even more carefully to certain other antecedent events (weekend visits at home, for example) and helped it anticipate times in which it might be necessary to intervene quickly before small incidents could escalate to major disruptive episodes.

TIME-OUT

The use of non-secluded time-out takes several forms depending on the age of the child and the classroom setting. At the Neuropsychiatric Institute there are five basic levels which can best be described by case illustrations. These are not necessarily presented in increasing order of severity, since levels of social development are different in each case. The first three levels are used primarily for younger children functioning at preschool or primary levels. These are commonly used for children like a four-year-old autistic youngster in the early childhood program. Among his other problems, this boy had difficulty keeping his hands off other children or their materials during a lesson. Ignoring and reprimands did not appear to be affecting the high frequency of his misbehavior.

The first level of time-out (turning chair around) was begun after the first three or four weeks following admission. At the first sign of the behavior, the teacher simply turned the child and his chair facing away from the group at the table saying "No, you don't touch!" The child was kept in this position for one to two minutes and then returned to the group as if nothing had happened. At the NPI caution is exercised so that the child is timed out only when he has made a deliberate attempt to reach out for another child or another's materials. There can be hazards in an aversive's generalizing to occasions when touching is allowed (e.g. touching one's own materials or another child when appropriate in a game).

The next level (cornering) was used when the child did not remain facing away in his seat or when he committed an aggressive act towards another child. This consisted of sending the child with his chair to a corner of the room, facing away from the group. He remained there for two minutes, plus 30 seconds of quiet behavior prior to returning to the group.

The third level (corner with restraint) was used when the boy refused to go to or stay in the chair in the corner. When the child was put in the corner, his arms were crossed in front of him and his hands were held from behind the chair by the teacher. His hands were held firmly but not so tightly as to cause discomfort. The same time limits were in effect as at level two above.

At each level the behavior was specified (e.g. "you don't hit") so that the child knew exactly what behavior was being punished. It should also be noted that with some children warnings were used before the child was actually given one of these three levels of time-out (e.g. "Do you want to go to the corner?" or "Do I have to hold you in that chair?"). These were often sufficient to eliminate the behavior for the remainder of the period so that the aversive itself, or a more severe form of it, would not be necessary. On some occasions when younger children became overly aggressive during these procedures, the teacher might move temporarily to one of the seclusion procedures described above. The next two levels to be described are used primarily with older elementary and adolescent students.

The fourth level (hallway time-out) was used with an eight-year-old girl in our preacademic elementary classroom. This girl frequently caused disruption in the classroom with fits of temper when asked to comply with classroom routines or when the teacher refused to accede to her demands for instant attention. She often threw materials on the floor or tipped over desks on these occasions. Ignoring and reprimands were having a limited effect on her behavior. A hallway time-out procedure was initiated for tantrums and related behavior. The procedure consisted of immediately taking the girl by the arm and putting her just outside the door to the hallway and closing the door. During the first few occasions, the girl pounded and kicked the door; but the children in the class were instructed to ignore this, and teachers in neighboring classrooms were briefed on the procedure and asked to close their door during these times as well. The time-out usually lasted from five to ten minutes per occasion.

The tantrum and aggressive behavior decreased from one or two episodes per day to about three or four times per week, within the first three weeks of the procedure. At this point, a second phase was initiated similar to that used in seclusion procedures. At the outset of a tantrum or aggressive episode, the teacher simply called the child's name and said, "Take a time-out!" If the child did not go outside immediately, she was taken out as before. Under this phase, the rate of tantrums and aggressive acts decreased only slightly (to two or three times per week); but at least the physical struggle was avoided on all but a few occasions. This phase lasted two weeks.

In the next phase, the time-out procedure was modified to a "warning." At the very beginning of a tantrum or aggressive episode, the teacher was instructed to ask the child, "Do you need a time-out?" If the child could interrupt her tantrum, say "no," and return to work, no further consequences were needed. If not, the procedure in phase two was initiated as before. During this phase, the behavior continued to decrease to minimal levels.

The process of allowing the girl increasing control over her time-out procedure appeared to be a key factor in her being able to exercise self-control over her tantrums over time. Another key factor was the girl's motivation to participate in classroom activities such that she did not run away when placed outside the room without supervision. She remained outside the classroom waiting for a chance to re-enter. Had this not been the case a seclusion procedure would most certainly have been required.

The fifth level (restriction) was used with a twelve-year-old boy in the academic elementary classroom. This boy often teased other children, drew them into inappropriate behaviors for which they also received punishment, and interrupted classroom discussions with ill-timed remarks. Ignoring, reprimands, and social reinforcement for competing behaviors (e.g. participating in discussions and interacting appropriately with peers) did not appear to be diminishing the boy's asocial behavior. A restriction was given contingent on the first sign of such inappropriate behaviors; it was often but not always preceded by a warning. A restriction required that the boy sit quietly at his seat with no books or materials on his desk to distract him (i.e., provide reinforcing events during the restriction).

The restriction usually lasted anywhere from five to thirty minutes and had to be taken after the lesson was over, i.e. during free time and often continuing after the class period was over. Additional time was added in specified increments if the boy failed to behave appropriately during the restriction. Restriction was generally effective in helping the boy to control his behavior, although occasionally a seclusion procedure had to be initiated if his inappropriate behavior escalated during the restriction. It should be noted that this procedure presupposes a relatively high level of social awareness and self-control on the part of the child in order for it to be effective. In most cases, restriction has also been used with the *added* requirement that a child finish his or her assigned work *before* taking the restriction. Thus the child is not able to avoid completing his assigned work by getting restricted.

REPRIMANDS

Reprimands (admonitions to cease maladaptive or initiate appropriate behaviors) are used frequently in classroom situations. The difficulty with their use is that often repeated reprimands tend to lose their effectiveness (Becker, Madsen, Arnold & Thomas, 1967) and that loud reprimands tend to be aversive for nearby classmates who may themselves not be the target of the reprimand (McManis, 1967; O'Leary, Kaufman, Kass & Drabman, 1970). The experience of the NPI staff with the former is that ignoring maladaptive behavior while reinforcing competing behavior is generally more effective than repeating the same reprimand over and over. Two staff members of the NPI outpatient department, who worked with teachers in a private elementary school for disturbed children have provided evidence (Jones & Miller, 1974) that the use of a reprimand *early in the sequence of disruptive behavior* is very effective, especially to head off disruptive comments in a group discussion. These observations are supported by experience in the NPI school.

Recently the use of loud and soft reprimands was analyzed along with other aversives used with preschool handicapped children over a three-month period (Forness, Frankel & Landman, 1976). The data suggested that "soft" reprimands are used quite frequently in teaching interactions (between one fourth and one third of all aversives used) and that in only a very small percentage of time are they not effective and therefore lead to use of more severe aversives. "Soft reprimands" were defined as those aimed at terminating bad or initiating good behavior and delivered in a

normal tone of voice. "Loud reprimands," in which the teacher displayed a noticeable upward change in voice volume and which could be heard by all children in the room, comprised less than two percent of the total of all aversives used. It should also be noted that reprimands, whether loud or soft, seem to be much more effective if they are brief, specific (e.g. "You don't hit!" or "You don't run!"), administered early in the sequence of misbehavior, and delivered in close proximity to the target child so there is no doubt *in anyone's mind* who is being punished. While the question of "spillover" effects (an aversive effect on a child who is nearby but not the object of a loud reprimand) has not been adequately resolved, extreme caution in the use of loud reprimands in group situations seems warranted.

As with the use of ignoring (which will be discussed in the next section), the effective use of reprimands depends very highly on the relationship of the punisher to the recipient (cf. MacMillan, Forness & Trumbull, 1973). One example from the author's early days at NPI will illustrate this. On occasion the author would work in the early childhood classroom with one eight-year-old autistic boy who had a variety of ingenious ways to manipulate adults in his environment. One day he suddenly left his seat at the table where he was working and began to rummage through the teacher's desk. Like a good academician, the author systematically worked his way down the aversive hierarchy: ignored his rummaging while repeating the academic demand, reprimanded him in a loud voice by specifying that he return to his seat, warned him that he would be put in time-out, and was definitely on the verge of muscling him into time-out. At that point, his primary teacher entered the room, saw what was happening and, indeed, did nothing more than raise her left eyebrow in the boy's direction. He was back in his seat like a shot.

It was clear that this teacher was cashing in on the result of a consistently positively reinforcing relationship with the boy, built up over several months time and coupled with the initial use of stronger aversives, which were no longer necessary. It was just as clear that the author's effectiveness was limited by his lack of contact with the boy and, especially by the fact that he did not represent a reinforcing event in the boy's life. The author's aversives had therefore not yet acquired the power to modify the boy's behavior in quite as efficient a manner as had his teacher's. Similar experiences have been noted with particular children in a classroom who are more responsive to the one teacher on the team whom they seem to perceive as uniquely reinforcing to them. That teacher inevitably needs to use only the mildest of aversives to control the child's behavior while other equally effective teachers may be relegated to using loud reprimands and time-out procedures for the same level of misbehavior.

IGNORING

In the NPI School, a distinction is made between two types of ignoring: "active" ignoring, in which the teacher purposely turns away from a misbehaving child and "passive" ignoring, in which the teacher acts as if the misbehavior never occurred and simply repeats the demand or continues the lesson. In relation to other aversives, both forms of ignoring are used with relatively high frequency, with all levels of children in the school.

While use of ignoring becomes almost automatic with good teachers, it is extremely important (as with the use of other aversives) that the child be reinforced for appropriate competing behaviors, so that he knows how to gain the teacher's attention and approval. It is also crucial to the effectiveness of ignoring procedures that the teacher has a *significantly positive relationship with the child*, so that ignoring is indeed aversive.

Active ignoring requires that the teacher look away from the child and/or direct his or her attention to another child in the group. As an *initial* intervention for mild self-injurious, stereotypical, or tantrum behaviors, this can be very effective. One six-foot, 190-pound adolescent in the interim program often threw tantrums typical of a young child when demands were made on him for academic work. He occasionally threw papers on the floor, tipped over desks, and stormed out of the room. The teacher simply ignored him and made a show of directing his attention to another student. Having found that no one was reprimanding him, chasing him, or otherwise making a show of his behavior, the boy would eventually return to his seat, at which point the teacher quickly returned to the boy's side and resumed the lesson, as if nothing had happened. As soon as he appeared under control, he was reminded in a friendly way by the teacher that he also needed to pick his things up off the floor.

A potential hazard, particularly in the NPI setting, is that a child might escalate his level of misbehavior in order to gain attention. For example, the boy just described ripped a steel door from its hinges in a nearby restroom when he felt that ward staff was ignoring his running away on another occasion. Other more direct techniques, such as seclusion, may have to be used in such instances. Another problem is the difficulty in controlling social attention from classmates. Examples have been noted, however, where early childhood and elementary teachers have successfully instructed and reinforced their class to ignore a tantruming child. On one occasion, an entire preacademic classroom of eight children worked quietly and diligently at their seats on workbook exercises, while a seven-year-old girl screamed and kicked on the floor in an incredibly disruptive display of tantrum behavior. Indeed, there have been times when the children's ability to ignore the girl's tantrum behavior seemed almost pathological in itself.

Passive ignoring is effective with a variety of children. This technique has been used with particular effectiveness with adolescent psychiatric patients who often attempt to control the situation by their apparent hypersensitivity to reasonable demands. For example, when asked quietly but firmly to please leave the telephone alone, return to her seat, and get to work, one adolescent girl yelled back, "I didn't do anything! You *never* let me alone! Why are you always picking on me?" Rather than respond to the girl's accusations, her teacher simply repeated quietly, "Back to your seat please and be sure and let me know when you've finished that chapter!" It is apparent that proceeding calmly with business as usual, not attending to distracting responses, and redirecting the student to an appropriate response served to negate a potentially troublesome situation.

Passive ignoring is also frequently used in conjunction with physical prompts, particularly for younger children who are non-compliant. One

four-year-old autistic boy in the early childhood program was asked to put away his blocks in a box during clean-up time at the end of the play period. The boy refused with a shake of his head and began taking other blocks out of the box. The teacher simply repeated her demand, putting a block in the box herself and saying, "See? We put it away!" When the boy refused to follow the prompt, she repeated the demand again, then placed the boy's hand firmly around a block, putting it in the box. She then praised him for putting the block in the box. She next returned his hand to another block, this time only guiding it into the box, and praised him again. At this point, the boy began to pick up the rest of the blocks of his own accord.

OTHER TECHNIQUES

As indicated earlier, no attempt will be made to cover the levels of "negative feedback" and "self disappointment" since these are, in a sense, goals or levels at which the child has achieved a measure of internal motivation typical of normal children. However, brief mention will be made of a few techniques which are rather infrequently used for specific purposes and which do not necessarily fall at convenient places on the aversive hierarchy.

One technique which has been employed is both a prompt and, in a sense, a potential aversive. An illustrative case involved a young autistic girl in the early childhood program. This girl presented with a number of extremely aggressive behaviors directed to both teachers and other children, as well as several self-destructive behaviors. She was markedly delayed in several areas of development. She was capable of walking but frequently refused to. She had either to be brought to school in a toy wagon or totally supported by one of the nursing staff. The school staff was concerned that the technique for making her walk which the ward used (carrying her with support under her arms and chest) was problematic and not conducive to helping her to walk on her own.

In order to get the girl to walk on her own, the school staff asked to use a technique which involved the teacher using the thumb and fingers to exert minimal amount of pressure simultaneously to the girl's inner wrist and the back of her hand. The effect was one which thus caused the wrist to rotate forward and therefore used her own muscle reflex action to bring her to her feet. Once on her feet, she was capable of walking on her own. This technique was always paired with the demand, "Stand up!" This technique seemed not to be particularly painful to the girl and was used only a few times before she began responding to milder physical prompts and verbal requests. The technique is also used on rare occasions for very young children who fall to the ground in a fit of tantrum while enroute from one classroom to another.

It might be noted at this point that the NPI staff generally uses ignoring procedures, coupled with reinforcement of competing behaviors, for most occasions of self-stimulating and self-destructive behaviors of autistic children in the school. On relatively rare occasions seclusion (cf. Frankel, 1976), differential reinforcement of other behaviors (cf. Frankel, Moss, Schofield & Simmons, 1976), and overcorrection (cf. Freeman, Graham & Ritvo, 1975; Freeman, Moss, Somerset & Ritvo, in press) are used for

these and other severe forms of behavior in collaboration with ward staff. It should be noted that electric shock, slapping or other forms of corporal punishment have not been used in the NPI hospital or in the NPI school for the past six or seven years. At times the Neuropsychiatric Institute has suffered "guilt by association" with other programs for autistic children on the UCLA campus which do use these procedures. There have, however, been rare occasions when physical and chemical restraints have been needed on the hospital wards to control the behavior of a severely acting out adolescent, especially when nursing personnel unexpectedly find themselves understaffed, and potentially violent situations erupt which cannot be dealt with by other means. These procedures are always seen as temporary expedients and are never in effect longer than a 24-hour period.

Finally it should be noted that, although the behavior modification literature generally supports the calm, even-tempered delivery of aversives, there are times when a genuine display of anger from a teacher is not only warranted but helpful. One such case involved an eleven-year-old boy in the academic elementary classroom with problems of delayed social development. Time-out and seclusion procedures were frequently used for his fits of tantrum, destruction, and aggression along with special programs and a great deal of social reinforcement to develop appropriate social responses. Progress, however, was extremely slow. On one occasion, after his program was well along, he hit a classmate in the hallway on the way back to the ward, just outside the classroom. His teacher gave him a choice between continuing with him to the ward and putting him in seclusion in the security room or trusting him to return by himself to the classroom and take a restriction at his desk.

This was at a point where the goal was generally to give the boy more control over his own behavior, whenever possible with milder forms of aversives. The boy returned to class but immediately began to throw books off the shelves and tip over desks. The teacher re-entered the classroom just as another teacher had begun to restrain the boy. The first teacher exploded in an angry, loud, but controlled tirade regarding the boy's behavior and his betrayal of trust which the teacher had placed on him. Those who were observing felt not only that the tirade completely astonished the boy, but that it seemed justified as a means of bringing home to him an objective lesson regarding the social and emotional consequences his behavior might evoke from others in similar situations. The boy's subsequent behavioral improvement seemed fortunately to bear this out. Such a response from a teacher is only effective if used quite sparingly and genuinely, but certain occasions call for an honest emotional response and such a response can be very instructive for certain children.

CONCLUSION

Later in this conference, certain guidelines will be proposed regarding the use of aversive procedures. This will not be an easy task. Certain ways in which punishment can be used in a developmental fashion have been suggested. It should further be stressed that aversives in the NPI school, particularly the lowest three levels (seclusion, time-out, and loud reprimands) and other severe techniques, are generally used only after discus-

sion with and approval from the total interdisciplinary treatment team and/or the child's parents. There is no question that this is an era where frank and open discussion of such techniques and alternatives to their use is a *sine qua non*. It goes almost without saying that data collection on their effectiveness is also a necessity along with a general periodic review of all punishment procedures. The latter should be done as professional literature and past clinical experience dictate.

Finally, it should be underscored that the use of punishment is no substitute for good teaching. Over the past five years in the NPI school, particularly with severely disturbed children in the early childhood program, there has been a marked decline in the use of lower level aversives *and* reinforcers. It is the author's belief that this has been directly linked with a corresponding increase in the staff's sophistication with developmental assessment and educational programming.

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Punishment and Educational Programs for Behaviorally Disordered and Emotionally Disturbed Children and Youth: A Personal Perspective

Frank M. Hewett
University of California at Los Angeles

In contrast to many of the well-documented and scholarly papers in this collection, the author will attempt to share some of his personal experiences regarding punishing consequences and special education. First, the use of punishment in general will be reviewed and second, a number of deterrents and alternatives to punishment in classrooms for behaviorally disordered and emotionally disturbed children and youth will be discussed.

Losing Something You Want

Perhaps the most common punishing consequence used in both regular and special classrooms is denying the child a privilege that he or she desires. Being kept in from recess, having to stay after school, not being able to go on the class picnic, and losing one's job as class hall monitor are all negative consequences used every day with nonexceptional children. In classrooms for disturbed children, the withholding of privileges often takes a more systematic form through the use of response cost procedures. The procedures involve taking away something the child already possesses (e.g., recess time). Response cost has been shown to work in some cases but not without potential negative side effects (Rutherford, 1978).

In the engineered classroom (Hewett, 1968), students are given check marks on a regular 15-20 minute interval basis. Checks are given for accomplishments or withheld for problem behavior. In this program the author has observed a number of variations for giving check marks to disturbed children that teachers have used. One teacher reported serious problems in his classroom. There was much bickering and fighting among the students and no apparent motivation to "work" for check marks. This teacher's class was often visited by school and district personnel who wanted to observe the engineered classroom program. When any visitor came in, the teacher immediately shifted from the standard procedure of giving up to ten check marks every 15 minutes. As any sign of misconduct occurred, he immediately went to the offender, bent down close to his ear, and in a quiet but threatening manner said, "I am putting dots into four of the boxes on your Work Record Card to remind me not to give you four check marks when it is time to give check marks."

When this came to the author's attention, he talked the matter over with the teacher and suggested use of the check mark system in this manner was creating a negative association with check marks and the entire program. Indeed, one could sense the tension and disgruntled attitude of the students when in the room. In an effort to reverse this negative association, the teacher stopped the response cost threats and for one morning put a candy unit on each check mark given. The effect was dramatic. Within one week the boys had relaxed, the classroom climate changed, and the entire program was working more smoothly. Classroom climates are extremely important to consider. Positive climates are probably much more apt to develop as the result of a success orientation rather than a "one false step and we've got you" approach.

Another teacher reported to the author that the check mark system was a "disaster" along with the entire engineered classroom design. She had followed the design to the letter except for "one small change." Each morning when the children arrived, they were given a card already filled with check marks given in pencil. As the day proceeded, misconduct was dealt with by the teacher erasing one or more check marks. The effect of this procedure was similar to the effect of the previous situation, development of a negative, disgruntled climate. Elimination of this procedure also produced the same results.

In the author's experience, holding back check marks in a program that administers them on a continuous and scheduled basis is not really administering a punishment (from the child's perspective) because of the considerable quantity available to the child over a school day. The purpose the check marks seem to serve is to "alert" the child to some behavioral or functioning area where improvement is needed. To enhance this aspect, it is useful to use alphabet letters instead of slash marks on the card. Five possible letters are given for how well the child did with the task (A = paying attention, S = starting, W = working, T = taking part, F = finishing, R = being right, and N = being neat). An additional five check marks are given for how well the child followed class rules or for "being a student" (D = doing what you were told, G = getting along with others). The issue of "losing something you want" as an alerting versus punishing event will be discussed later on.

Getting Something You Don't Want

Theoretically, the use of time-out procedures is supposed to involve "losing something you want" (i.e., lack of opportunity to receive positive reinforcement in the classroom). In practice, this may not always be the case. A school district the author visited had constructed a special school for disturbed children with classrooms that had built-in time-out rooms with self-locking doors. If a time-out was felt appropriate for a given child, he or she would be told to go into the room. It had no windows and was lit by a single light bulb in the center of the ceiling. If children assigned a time-out refused to go into the room, they would be dragged, often kicking and screaming, and be locked in the room for a specified period of time. Thus,

"time-out" had really become "solitary confinement" with physical abuse thrown in for good measure.

One notorious episode of "time-out" in this district made local newspaper headlines and TV newscasts. A new student arrived and was placed in a regular classroom. In 20 minutes he had kicked the teacher twice and was removed to one of the special classrooms for disturbed children. In less than 20 minutes he went after the teacher in the special classroom. Dragged kicking and screaming he was forced inside the darkened time-out room (a previous occupant had smashed the light bulb) and locked up for two hours. He emerged with bleeding fingers from scratching on the door.

It is the author's opinion that the practice of physically forcing a child into a time-out area is a losing proposition from the start. The message, "we must have you leave the classroom for a time because you are not behaving as a student" is simply overshadowed by the message "we are bigger and stronger than you, and we will punish you when we think you are bad." This latter message completely violates the principle of time-out as a constructive "lack of opportunity to receive positive reinforcement." In cases where children refuse to go to a time-out area, they should probably be sent to the principal's office with whatever force necessary applied by someone other than the classroom teacher (e.g., PE coach, custodian, principal). Physical confrontations or "show downs" between the teacher and a student in the classroom in full view of the other children are not likely to have positive consequences for anybody.

Overcorrection procedures have been utilized with disturbed children, particularly the severely disturbed. Overcorrection may involve two components, 1) restitution, and 2) positive and negative practice. Restitution has not been systematically studied, but the author is reminded of an example of its use with a mildly disturbed boy. The boy was a bully and often destructive with school property. One day he ripped an expensive upholstered chair with a knife. The principal confronted him and explained the chair cost fifty dollars which the boy would have to pay. However, an alternative was available. For each day the boy did not physically abuse another child, one dollar credit would be subtracted. This meant that the agreement would be in effect for ten weeks of school. The effect was remarkable. The boy never came close to touching anyone else and improved his general behavior in the classroom. Monday morning of the eleventh week was something else. On the playground before school he "beat up" four smaller children. Escorted into the principal's office and confronted with his deed, the boy replied with a puzzled look, "But I already paid you back for the chair!" One would have hoped that his improved behavior would have brought him enough positive reinforcement to result in a "maintenance" effect. But sad to say, it had not.

Positive practice involves the child practicing positive behavior following exhibition of negative behaviors (Sulzer-Azaroff & Mayer, 1977). The De Jarnette Center for Human Development in Staunton, Virginia, systematically applies this approach by means of a "fix-it shop." Children who exceed classroom limits are sent to a special area supervised by a full-time teacher. The negative behavior (e.g., leaving your seat without per-

mission) is discussed and its incompatible counterpart practiced (e.g., raising your hand and asking permission). The fix-it shop is not a punitive environment but rather a relatively positive-reinforcement-free setting within which the child's attention can be directed toward specific behaviors that need to be improved. While this approach (as is true with *any* approach in special education) does not work with all children, it has proven a useful "alerting" and training tool with many.

Negative practice has been used with severely disturbed children in an effort to reduce self-stimulatory behavior. The author is aware of three instances in which a negative practice approach was applied. A ten minute practice period was imposed as follows:

1. An eight-year-old girl was continuously annoying her family by switching the living room light on and off in rapid fashion. Her mother forced her to turn the switch on and off by holding the girls hand on the switch and pushing it up and down.
2. A seven-year-old boy was constantly crawling on the floor and rubbing his nose on the carpet. The teacher held his head down and forced the boy to rub his nose.
3. A nine-year-old boy was given to "flicking" tufts of hair on his temples in a repetitive fashion. The teacher held his wrists and forced him to perform the behavior.

In each of these instances the author was told the technique "worked" by the negative practicer. However, in the cases of the seven and nine-year-old practicers, the ten minute period ended with a skin-scraped nose and red wrist welts respectively. While there has been some research (some pro, some con) for positive practice, negative practice needs to be more systematically studied. If the approach worked with the two boys, and their self-stimulatory behavior was actually reduced, isn't a scraped nose and reddened wrist actually a small price to pay for such improvement? This question, as is the case with all questions regarding what constitutes too great a price to pay with respect to the sometimes beneficial effect of punishing consequences, must be answered strictly on an individual basis. This particularly applies to the use of electric shock as a means of reducing self-destructive behavior. From the author's experience the following questions are relevant in deciding whether punishment is appropriate in an individual case.

1. Is it absolutely necessary? Have all non-punishing avenues been explored?
2. Is there any possibility of physical harm being suffered as the result of the punishment? With what degree of certainty can you answer this question in the negative?
3. Is the administration of the punishment a well-understood procedure on the child's part? Does the child understand not only what is likely to happen when he or she behaves in a particular manner but also why the punishing consequence is applied?
4. Is the administration of the punishment a well understood procedure on the punisher's part? Does the punisher know precisely why the punishment is being applied, and is his or her value system entirely at peace in the punishing situation?

This latter question has been of particular concern to the author. During a speech training program with an eleven-year-old, non-verbal, autistic boy, he was invited to use an experimental room which had an electric grid on the floor. A mildly painful electric shock could be delivered by the experimenter to anyone standing barefoot in the room. The author and the boy removed their shoes and entered the room. The author was attempting to get the boy to elicit a particular sound on cue. When the boy failed to respond appropriately after three prompts, the shock was turned on. After two trials the author terminated the session. The effect of the shock on the boy, the look of terror on his face, and the sickening discomfort felt by the author all combined to lead to the termination. Whether we like it or not, we are what we are. Use of the electric grid room might be both disputed or supported on a number of grounds. But before one consults the research literature or the experts, he must consult himself. In short, use of any approach in special education that one cannot wholeheartedly endorse and feel entirely comfortable using is highly unprofessional. With respect to behavior modification techniques questioned by some teachers as too mechanistic for their teaching style, the author has often made the following point:

> Behavior modification techniques are to help you be yourself more effectively and efficiently. If you cannot be yourself using them, forget it. They probably won't work for you anyway."

What about the use of punishment in classrooms for disturbed children? Does it belong? Unfortunately, these questions have not been answered and will not be by the end of this paper. All one can answer with respect to the questions is: "It all depends." In the remainder of this paper, we shall discuss deterrents and alternatives to punishing consequences that may be useful in school programs for disturbed children and youth.

Deterrents and Alternatives to Punishing Consequences

A number of approaches may eliminate or at least reduce the probability that punishment will be necessary in the classroom. Among these are prevention, ignoring, shaping, alerting, role taking, compromising, and reinforcement overkill.

PREVENTION

An important consideration related to the entire issue of punishment is the punishing *event* versus the punishing *climate*. The punishing event may be quite specific. Such and such a behavior leads to a time-out, verbal reprimand, loss of privileges, or the like. Once over, the punished act is likely to be forgotten, and life goes on. However, in some programs where punishing events in a specific sense may never take place, a punishing climate may exist that makes life miserable for every student. A punishing climate is one in which children suffer from boredom. A climate in which there is no adventure, excitement, fun, or surprise. It is a climate in which failure may be ever imminent, frustration all too common, and rejection an every day occurrence. There may be inconsistency in rule enforcement.

Who needs to inflict corporal punishment or banish students to time-out in such a climate?

If the classroom program involves a punishing climate, chances are punishing consequences for problem behavior will be inflicted on a routine basis. Bored, frustrated, and unhappy normal children are at risk for misbehavior, and the risk runs considerably higher with children who are disturbed. The number one deterrent to the necessity of punishing consequences is probably a classroom environment and program that is wholeheartedly devoted to promoting "time-in" behavior. It is an environment and program that children look forward to, and if the necessity for a "time-out" occurs, it involves a genuine time-out from positive reinforcement. Rather than focus on clever ways of implementing a time-out punishment, however, one should be diligently seeking ways of promoting "time-in."

In the author's experience a successful way of promoting "time-in" is to create a well-organized classroom structure that communicates to the child it is ready to handle all problems, that it is fair and predictable, and that it is oriented toward helping the child achieve success. Providing some type of systematic feedback to the child regarding his or her status in the program throughout the day is a vital part of such structure.

A check mark system was described earlier. It is during the administration of check marks that the teacher becomes a part of that structure. Check marks are given because they are *earned* or not given because they were *not earned*. They are not given on the basis of capricious whimsey on the part of the teacher, favoritism, or a randomized routine. The teacher who wishes to capitalize on the potential of the check mark system to really underscore the existence of an all-ready and all-predictable classroom structure will communicate in essence:

> I can only give you the number of checks marks you have actually earned. That's the way it is. I work here, too. The system is bigger than both of us.

Another approach to prevention is the maintenance of a physical classroom environment that pays meticulous attention to small details and is ready to "spring" into action in seconds to head off a potential crisis that might result in a child's becoming a candidate for punishment. Alternative tasks should be available and alternative work settings should be set up. The record player should be plugged in. A record should be on the turntable, and the player turned on. The ear phones should be plugged in and adjusted, and the volume regulated. As a given child exhibits boredom, restlessness, irritability, and the like, he or she can be placed at the record player, headset on, in a little over five seconds. No time is lost searching for a needle or an outlet or a record. Instantaneous intervention.

Another preventative technique involves the teacher and aide never turning their backs on the entire class if at all possible. As they work at an individual child's desk, they can see any other child's hand go up requesting help. Hands that are put up that go unnoticed for long periods often become hands that tap pencils on desks or poke neighbors, and we have a problem. At the first sign of a raised hand, the teacher or aide positioned to see the class, calls out:

> I see your hand, Mary. Thank you for raising it. I will be right there as soon as I can.

This immediate recognition of hand raising can often postpone potential misbehavior and at least "buy time" for the teacher until he or she can respond to the child's request.

Anticipatory approaches such as bolting the chronic chair tipper's chair to the floor also may avoid confrontations and potential negative consequences. Since self-stimulatory behavior is so interfering in programs for severely disturbed children, the author has considered developing a "learning tray." The tray would have handles on each end for the child to hold and would actually constitute the child's "desk." Tasks (e.g., form discrimination) would be placed in one of three color coded divided sections on the tray, and the child asked to indicate which section has such and such an object (e.g., "Which one is the ball?"). Three color-coded foot pedals matching the tray section would be at the child's feet. By pressing them the child activates a color coded light on the tray. Through use of tangible reinforcement or praise and an interesting activity, the child may be engaged in a meaningful lesson devoid of any self-stimulation since the means for engaging in it (i.e., the hands) are involved in the task itself.

A final approach that may "head off" situations that could result in punishing consequences is providing opportunities for the child to "let off steam" or receive supportive counseling when he or she has a problem bothering them. The author maintained an open-door therapy program with disturbed adolescents several hours each day in a special school (Hewett & Coleman, 1962). The boys could schedule a fifteen minute appointment at a moment's notice. The author was surprised how genuine most of the requests were, and only a few boys used the opportunity to "get out of work." He was also surprised at how effective it was to get adolescents who refused any formal contact with "shrinks" to open up and reveal their feelings and frustrations. Perhaps one day there will be crisis hot lines in the schools for students who would like to communicate with a therapist about a problem or feeling happening "now" rather than try to recall it during a regularly scheduled therapy hour.

Prevention is the great granddaddy of all approaches for solving the dilemma related to the use of punishing consequences. While it is not always possible, a prevention orientation can go a long way toward reducing the necessity of using punishing consequences.

IGNORING

Simply ignoring behavior likely to lead to punishing consequences may result in that behavior diminishing or gradually extinguishing. At least that is what is supposed to happen theoretically if the behavior is in part being reinforced by others paying attention to it. While teacher attention to problem behavior may be easily withheld, what about the attention of the other children? The author has witnessed numerous examples of teachers using both check marks and social reinforcement to control this. Moving among the children seated around the problem student, the teacher or aide may quietly say to them,

> Here are five bonus check marks for not paying attention to Bobby right now. We can all help him by not looking at him.
>
> Thank you very much for not looking at Bobby right now. I like the way you are working and being a student.

In some cases the problem student gradually de-escalates his behavior (e.g., pounding on desk, throwing paper on floor, loudly cursing) and settles down and goes back to work. At the first sign of "student behavior" the teacher or aide may immediately move in to either give check marks or praise for "being a student" with no reference made to the problem behavior.

However, in other cases things don't work out so smoothly. To begin with, the entire class may be disrupted to a point where any independent work is impossible. The process of extinction may exact too great a price in terms of the learning rights of others. Also, there is always the possibility that the other children will "model" the problem behavior, an effect called "the phenomenon of contagion" by Redl (1949). Although there is no guarantee simple ignoring will always work, it is an approach commonly tried by teachers who want to avoid confrontation and punishing consequences.

SHAPING

Children whose behavior problems have earned them total exclusion from the classroom can often be helped by the process of "systematic inclusion." Barbara was an eight-year-old, neurologically handicapped child whose seizure disorders made her groggy much of the time. Despite her grogginess, Barbara managed to stir up a great deal of trouble with her shouting out, refusal to follow rules, and continual foot stomping on the floor. This had resulted in her total exclusion from even a special education program.

The author met with Barbara's parents and a plan was developed wherein Barbara would come to school for 15 minutes in the morning and immediately be taken home by her mother. She was told "how long" she stayed in school was dependent on how well she worked and behaved. The first week went well. Barbara's interest could be controlled for the 15 minute period but not much longer. Her mother had her wear tennis shoes which kept foot stomping disruption to a minimum. Each week Barbara's time was increased by 15 minutes until by midsemester she was attending over two hours with very infrequent disruptions. By the middle of the next semester she was full time in a special day class and during the following year she spent time in a regular class. Barbara's seizure disorder did not diminish, but her behavior problems dramatically changed. The systematic inclusion approach had made "being in school" something you worked for rather than something you work to avoid.

Mark was a ten-year-old boy whose severe behavior problems had resulted in total exclusion. The author worked with the parents to set up a program similar to Barbara's. The only problem was that Mark was not even a candidate for 15 in-class minutes. Therefore, his first 15 minute sessions were spent playing on the swings outside the classroom. At the end of the session, Mark would go to the door of the nearby special day class bungalow where the teacher would meet him, give him ten check marks for "being a student," praise him, and send him home with his mother. Gradually, Mark went to one 15 minute period putting a puzzle together at the "Order Center" in the classroom plus one period on the

swings. By midsemester, he was spending one hour in the classroom and no time on the swings. The systematic inclusion approach had worked well, and his classroom time continued to increase. The message again seemed to be "you have to earn the privilege to come to school" as compared to "we will punish you if you are bad in school and send you home." Concern with the "messages" conveyed to children should take top priority in our efforts to determine its efficacy.

A shaping approach that also may reduce the probability of a situation within which punishing consequences may occur is the differential reinforcement of competing behaviors. The chair-tipper is reinforced at the moment all four legs of the chair are on the floor, the reluctant hand-raiser during even a minimal attempt to get the teacher's attention nonverbally, the bully during a display of cooperative behavior, the whiner during a moment of independence, and the out-of-seater while working at his or her desk. The theme of this approach and for that matter this entire paper is the same as the title of the popular song of some years ago, "Accentuate the positive and eliminate the negative."

ALERTING

A common antecedent of a punishing consequence is a warning or series of warnings that trouble lies ahead if a child does not terminate some problem behavior.

> Tommy, this is the second time I have asked you to stop poking Laura. You do that one more time, and you will stay in from recess.
>
> Remember what happened yesterday, Mike, when you wouldn't stop tapping your pencil on your desk?
>
> That's it, Vincent. I've asked you over and over to stay in your seat. You're going to Mr Carlson's office.

Sometimes such alerting gets the child back on course. Sometimes it merely reinforces the behavior. With disturbed children a clearly defined systematic alerting procedure is often very useful. Some examples:

1. Student violates a rule and teacher reminds him or her what the rule is and why violation is unacceptable (e.g., bothering others). Again rule violated. Student given choice. Discipline will be taken now or later automatically if problem occurs again. Again the violation and discipline takes place. Incident immediately forgotten about (Ott, 1958).
2. Student violates a rule and teacher reminds him or her of the rule. Again rule violated teacher reminds student that one more violation will automatically lead to "flooring" (student pinned on floor by two or three technicians for several minutes). Violation again and flooring occurs.

In both of these examples the alerting procedure results in the child being given responsibility for administration of the punishing consequences and de-emphasizes the teacher's role as the punisher.

In some programs an alerting device may be placed on the child's desk. A light may be affixed to the child's desk with a remote switch the teacher can activate. At any time when the child's behavior is not in line with expectations, the light may be turned on "alerting" the child. Patterson (1965) has successfully used such an approach. Another approach is to place a card, one side of which is red and one side of which is green on the

child's desk. As long as the green side is up, the child is meeting expectations and earning points. However, if the teacher wishes to alert the child to a problem, the card is flipped over so the red side is up (Walker, 1977).

The author is reminded of a second grade teacher who had a very dependent and whiney child in her room. Almost without fail the child would fuss and cry if he smudged his paper or drew a crooked line. One day when he was working well the teacher took the class mascot, a small stuffed toy tiger, from her desk and put it on the child's desk. Nothing was said. However, once the child fussed the tiger was removed only to be replaced on the desk during non-fussing work time. The child quickly learned that it was his behavior that controlled the tiger's presence and reduced his fussing without a word being spoken by the teacher.

The author used darkness as an alerting approach with a four-year-old, autistic boy in a special teaching booth (Hewett, 1965). The booth had two sections, one for the author and one for the boy. A sliding panel or shutter joined the two sections. The only light source was from the author's side. When the child failed to respond to a task three times in a row, the author quickly lowered the shutter leaving the child in the dark. A lighted button came on on the child's side after a five second interval, and the shutter was immediately raised and the task resumed when the child pushed the button. If the child failed to respond after three more requests, the shutter came down again. This time a ten second delay was imposed before the light button came on. Successive failures to respond each resulted in cumulative additional five second delays. The technique worked, and seldom were there more than one or two shutter drops necessary during a training session.

Since the shutter drop resulted in fewer failures to respond, it qualifies as a punishing consequence. However, in the author's opinion it was more of an alerting condition underscoring the importance of cooperating in the learning situation. No child who was placed in the booth ever cried in the dark (although some psychodynamically oriented individuals decried the approach as inhumane), and the reason they immediately pushed the lighted button when it was activated seemed to be that it was boring to sit in the dark. The most powerful aspect of the light-on-desk, card turning, tiger-on-desk, and shutter drop techniques was that *no words were spoken*. Typically, when one alerts or punishes a child, there is verbal haranguing or lecturing involved. How much more objective and impactful it is having a nonverbal alerting event occur that reminds the child "that's just the way it is." Words are often our enemies when dealing with problems that occur among disturbed children. Most of them have been bombarded incessantly with words related to their behavior by angry parents, frustrated teachers, and even disgruntled peers. When one relies on words he often immediately falls into the role of one or more aversive persons in the child's past and has the negative feeling held toward them transferred to himself.

ROLE TAKING

Three types of role taking may be useful to consider when attempting to avoid the necessity of punishing consequences. One involves the teacher

assuming a particular role based on reputation either past or current, one involves children being placed in the role of managing their own school programs, and one involves placing the child in a role that is incompatible with his or her particular problem behavior.

The author visited a school in a California Youth Authority institution for adolescents who had committed serious crimes. Most of the classrooms were taught by teachers who had difficulty maintaining control and getting the students to work. However, in one classroom, one could hear a pin drop and each student worked diligently every period. The teacher in this room was a man in his late forties who had let it be known some years before that he had been an FBI agent in Chicago. Over the years his reputation among the boys grew as did the number of famous criminals he had personally caught or shot. The teacher did nothing to deny these alleged accomplishments, and as new boys entered the institution part of their peer indoctrination included these FBI stories. The author has also seen boxers and athletes in other sports attain a similar position of respect possibly because of their obvious "physical" adequacy for handling management problems.

Another example of a teacher establishing a role in an effort to avoid problems that may call for punishing consequences was provided by a teacher in a large inner-city school. This teacher had to deal with the "testing the limits" phenomenon faced by many new teachers who take over an established class. The class assigned this young man consisted of 15 disturbed adolescents who had been successful in intimidating and eventually frightening away two previous teachers. The new teacher waited for the first really serious confrontation by one of the students to occur. When it did he immediately grabbed the student and dragged him into the hall. The teacher backed the student against the door, lifted him by his shoulders, then smashed the boy's lower back against the doorknob. The only words spoken by the teacher were these: "I'm in charge in there and you had better believe it!"

The teacher and boy went back into the room and from the look on the boy's face his classmates knew the teacher had "roughed" him up. Once the boy communicated what happened to the others, there were no more confrontations, and the class ran smoothly all year. This single demonstration of punishing consequences earned the teacher the reputation or role as an individual "you did not fool around with" and as a result he was successful in teaching these boys more than they had probably ever learned in one year before. Was it worth it? What about the possible physical injury that might have been done to the boy? The author has shared this example with students in introductory special education courses and asked them to vote on whether given the fact one demonstration served to set the stage for an important year of learning and the fact of possible injury, was it worth it? The vote usually is around 50 percent for and 50 percent against. Among audiences of teachers with whom this example has been shared, the vote is usually very negative.

In the author's opinion one has to examine and weigh the potentials for a successful year, the possible injury, the "physical" orientation of the neighborhood in which the boys lived, the school and its policies, the use of punishment by the teacher and what this punishing act meant to the

teacher, and the likely reaction of the parents in answering the question, "Was it worth it?" One would never give this example as a demonstration of an effective means of punishment that might be used by other teachers in similar situations. Answers to the question would have to be decided on a strictly individual basis, and when all was said and done, if one ever were able to justify the act, it would probably only be for use by that particular teacher, at that particular time, in that particular school, with those particular boys.

Assigning roles to disturbed children that are incompatible with their problem behavior is an example of the use of role taking from the child's perspective. The author used an "Officer of the Day" assignment that rotated among ten disturbed adolescents on a daily basis. Th O.D. sat at the teacher's desk, handed out assignments, kept order, and gave permission to leave the room. The assignment was complete with a sign "Officer of the Day" and an adjoining slot in which the boy's name could be placed. Some of the highest risk problem students were on good behavior when their turn came to be O.D.

Another related approach in peer tutoring. The author has assigned nonconforming, hostile adolescents to tutor younger nonconforming, hostile boys. In the role of teacher, the adolescents often find themselves admonishing the younger students for not paying attention or for not cooperating. In one instance, the author overhead one adolescent tell his student, "If you don't settle down and work, you're not going to amount to anything," a message he himself had probably been given over and over in the past. Shy, withdrawn adolescents may also be assigned to tutor shy, withdrawn younger children and be placed in the same type of situation. They may have to encourage a greater degree of participation in the same way others had encouraged them to participate more actively in the past.

Self-management is yet another approach that may be useful in avoiding confrontations that often lead to punishing consequences. In an inner-city school for disturbed boys, each student found a file folder on his desk as he arrived in the morning. In the folder were a number of assignments, some academic, some recreational. Each task was worth a particular number of points, and the points earned special privileges at the end of the day. An arithmetic worksheet might earn 20 points, while a 20 minute "checker playing" assignment might only earn ten. The student could do the assignments in any order they wished. If they didn't want to do any of the tasks in the folder they could adjourn to the "I Choose Not to Work" Center and browse through magazines and books. The teacher and aide never taught a group lesson but circulated around the room giving help as needed. The atmosphere in this particular class had been tense and volatile prior to the implementation of the self-management approach. The author was impressed with how relaxed and business-like it became afterwards.

Another self-management technique involves allowing children to give themselves check marks or points. The author has never ceased to be amazed at how seriously most disturbed children take such a responsibility. Rather than gleefully give themselves all the check marks possible, they make a genuine effort to be fair and are often a little on the conservative side. However, there are some disturbed children for whom this would be

an entirely inappropriate assignment. Recess time is often a particularly difficult time for disturbed children. One teacher had each child tell what he or she was going to do during the recess period in an effort to get them to "plan ahead" and not wander aimlessly around the playground until they got into some kind of trouble. Upon returning to the room, the children were asked individually what they did, how they got along, and how many check marks (out of a possible five) they felt they deserved. Typically, the children pondered a moment or two and gave themselves three or four check marks instead of five. There were very few examples of not taking the check mark giving responsibility seriously.

Having teachers assume particular roles either by hearsay or demonstration and having children assume roles incompatible with their problem behavior and for managing their own assignment and reinforcement are all possible techniques for increasing the chances of avoiding the necessity of punishment.

COMPROMISING

Johnny is given an arithmetic worksheet. While the other children begin to work, he sits and stares blankly across the room. He pushes the worksheet away from him and tips his chair back. A scowl comes across his face. The teacher approaches and moves the worksheet back in front of him. Johnny swoops it up, crumples it, and sends a paper ball sailing across the room. What to do? What about restitution and making Johnny pay for the paper he has wasted? What about a time-out period? What about holding back check marks because of his behavior?

What about compromising and immediately altering the task given Johnny in an effort to keep him being successful and learning on some level? Over the years the author has watched teachers use an intervention approach which only as a last resort involved sending the child out of the room or home. It reflects six levels of learning competence — attention, response, order, exploratory, social, and mastery — and involves selecting an intervention from a logical array that holds promise for restoring and maintaining the child as a successful learner. One trouble appears to be starting with an academic task the array of options is as follows:

1. Send child to study booth with assigned task.
2. Modify (easier, different, harder) academic task.
3. Restructure expectations verbally.
4. Send to exploratory center for science, art, or craft task.
5. Send to order center for simple direction following task.
6. Take outside room and have undertake some large muscle activity (running, jumping).
7. Put on one-to-one tutoring.

Intervention two may involve the teacher "taking the blame" for problems with the assignment.

> I'm sorry I think I made the assignment too long. Here (tears off all but one row of problems), let's see if you can do these.
>
> Let's see if these addition problems are better for you. The multiplication problems I gave you at first may have been too hard.

Interventions four and five may involve the teacher saying:

> It doesn't seem as though you can be succesful with this assignment. Let's go to the order center, and I will give you a task there so you may earn your check marks this period.

The other interventions also involve a degree of compromising. Some teachers may react very negatively to this "backing down" and "rewarding negative behavior." Why coddle children who refuse to cooperate? They should be treated with a firm hand and not be allowed to push us around. All that will happen is that the child will refuse to work and misbehave on a regular basis in order to get an assignment changed or sent to a center where a more desirable task is available.

Theoretically, according to principles of operant conditioning the approach being suggested here is a classic example of feeding into a child's problem and making it worthwhile for him or her to nonconform and cause trouble. Actually, however, in the author's experience, maladaptive behavior does *not* necessarily increase when expectations are compromised (of course, words like "always" or "never" should not be in the special education vocabulary). In fact, it may greatly decrease. This is probably due to the effect of desensitizing the child to frustration and failure in accordance with principles of respondent conditioning. As was the case with Peter (Jones, 1924), gradual introduction of a feared white rabbit was made possible by first heaping a highchair tray in front of him with his favorite foods and toys.

Day by day the rabbit was brought closer until it was sitting on the tray and being petted by Peter. This is the procedure that should be followed in working with disturbed children. Guarantee them success while gradually introducing often aversive demands for performance and conformity. However, the experimenter working with Peter was ready to "move the rabbit back" if it upset Peter, favorite foods and toys or not. That is what is being suggested here. Don't be afraid to "move the rabbit back" or reduce expectations. As soon as the child is relaxed and working comfortably one can go about the business of moving the rabbit closer or increasing our expectations.

Another example of compromise involves increasing positive reinforcement when the child demonstrates less problem behavior rather than wait until there is no problem behavior at all. The child who is only tardy twice a week rather than on a daily basis may receive extra check marks or special praise on Friday. That is, it is not necessary to wait for the child to eliminate the problem. Rewards are given for moving in the desired direction.

The author had the opportunity to work with an inner-city special education program for disturbed boys. The check mark system described earlier was implemented. The boys truly valued their Work Record Cards and carried them home at night to show their friends. They would faithfully return with them the next day. There was only one problem with the check mark system. In many cases when the teacher withheld check marks for problem behavior, the boy would angrily grab the card, tear it up, knock over his desk, and run out of the classroom shouting obscenities. The punishing consequence of having something you wanted withheld produc-

ed a confrontation with authority that very often triggered such explosive behavior. The teachers in this program decided upon a solution. Give every boy the maximum ten check marks every work period regardless of his accomplishments or behavior. This would be automatic. But what would be done when a definite problem had arisen during a work period was this: the teacher would call the boy's attention to the problem and draw from one to five extra boxes on the border of the card, explaining that they would have to be filled before the card was complete and coud be turned in for an exchange item. It worked. Rather than a confrontation with authority, the extra boxes appeared to be perceived by the boys as a personal challenge.

The distinction between a "punishing confrontation" and a "personal challenge" is interesting to consider. The message inherent in the former may be "I'm not going to give you something you want," while in the latter it may be "you are going to have to work harder to get what you want." The author has read accounts of football training camps in which poor performance is "punished" by making an individual player "run sprints" or race up a hill with a steep incline after practice. While such a consequence is probably disliked by most players, it would be interesting to compare their attitude toward it with a more direct punishment such as being confined to quarters, losing telephone privileges, having their car taken away, or even having their salary cut. Which would alienate the player most from the coach? Which would have the most negative effect on team morale? The author would speculate that the personal challenge would result in the least negative reaction. It may be that running sprints, maintains an individual's sense of pride, self-control, and potency while being denied privileges results in feelings of shame, helplessness, and impotency. By having extra boxes added on the Work Record Card the child may feel "It will take more work, but I can do it. I am in charge." Having check marks withheld on the other hand may make the child feel "That teacher doesn't like me. I'm going to get back at him!" Confrontation versus challenge, an interesting issue for future study in the area of punishment.

REINFORCEMENT OVERKILL

Sometimes massively rewarding a disturbed child who is oblivious to milder forms of positive reinforcement can produce remarkable results. Barry was a fourteen-year-old adolescent enrolled in an inner-city, special education program. He had a police record of three felonies and was the acknowledged leader of his neighborhood gang and classmates in school. The school day went something like this. At 9:15 AM (15 minutes late) the classroom door would swing open, banging loudly on the wall. Barry would stand for a moment slowly surveying the class with a slight smile on his lips much the way Caesar might have done as he entered the Imperial Court. From the door he proceeded to the rear of the room, picked up a checkerboard and checkers from a shelf, set up the board and once again scrutinized the class.

A check mark system was used in this class, and it was generally effective with everybody but Barry. The other boys tried to avoid Barry's gaze because they wanted to complete their work and earn check marks. But it was futile to resist. One word from Barry or a beckoning finger meant

one had to leave his desk, go to the back of the room, play checkers with Barry, and lose check marks or get a "going over" by Barry after school.

The teacher had allowed this to occur reasoning that at least Barry was off the street and playing checkers was better than stealing from or assaulting others. However, it was apparent that Barry's power play tactics were having a negative effect on the teacher's ability to motivate and control the other boys. So a special contract was set up with Barry. It related to his favorite sport, football, and his athletic ability. If Barry filled 50 Work Record Cards with check marks (about one semester of average work), he would receive the best football available, one that cost twenty-five dollars. Such an incentive would impress most school children but to a boy living in poverty conditions, it was overwhelming. Barry became the model student, working harder than any of the other boys. He earned his football and was later sustained by less costly incentives.

Summary

It is almost certain that even with the most extensive research and experience, the most impressive elocutions and debating skills, no one is going to decisively be declared the winner in the great punishment debate—*Resolved: punishment belongs in educational programs for disturbed children and youth.* It belongs, but it doesn't belong, it works, but it doesn't work, it is necessary, but it is not necessary, it is harmful, but it is not harmful, it is worth it, but it is not worth it. This lack of clarity with respect to the place of punishment in special education is due to the *relativity* associated with all decision making related to the administration of punishing consequences. In this paper this relativity has been stressed and deterrents or alternatives to punishment have been suggested. Prevention heads the list. Altering punishing climates will lower the probability of punishing events having to occur. Programs and rooms that are "ready for anything" will also do the same. Sometimes if you ignore the problem behavior it will go away. Sometimes not. Shape "student" behavior through systematic inclusion and help children increase their tolerance for "schoolness."

Alert children that punishment may be around the corner, and it may help. Have them assume roles incompatible with behavior likely to lead to punishment. Compromising does not automatically lead to increases of problem behavior and "killing kids with kindness" or reinforcement overkill may be deterrent of choice with some economically deprived children. None of these approaches always works. Some may make matters worse in some situations. The teacher considering the use of punishing consequences should mull over all that is in this collection of papers. Then decide. Perhaps the words of Eric Sevareid, the television news analyst, who retired and was asked what he had learned during his career underscores the necessity of our living with the idiosyncratic nature of disturbed children and the relativity of all decision making in relation to them:

> To retain one's doubts, as well as one's convictions, in this world of dangerously passionate certainties ("Sign-off for Sevareid," 1972, p. 111).

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Punishment and Special Education: Some Concluding Comments

Frank H. Wood

The purpose of these papers has been to aid special educators, particularly those teaching seriously emotionally disturbed or behaviorally disordered students, to think carefully about the place of punishing and aversive procedures in their programs. It seems appropriate, therefore, to conclude with a summary of some facts and related observations that were stimulated by the presentations and conference discussions. This summary is a personal statement by the author rather than one that has received group approval. Reading it is not a substitute for reading the basic papers.

SOME FACTS ABOUT THE USE OF PUNISHMENT IN SCHOOLS

1. Most laws and court cases have been addressed to the use of corporal punishment in the forms of whipping, paddling or spanking of school children by teachers or school administrators. Such corporal punishment has been held not to be in violation of students' constitutional rights.

2. Most states permit some use of corporal punishment in schools. Within states, its regulation varies from one school district to another. Restrictions on its use are common, but few districts forbid its use under all circumstances. Few school systems have specifically regulated the use of aversive procedures other than the spanking/paddling type.

3. There is stronger approval of the controlled use of paddling and related forms of corporal punishment in some regions and communities of the United States than others. Disapproval is strongest in the Northeast; approval is strongest in the Southeast, South and Midwest. Nationally, a slight majority of parents and teachers favors the continued use of corporal punishment as one means of controlling or changing the behavior of students.

4. Empirical research clearly indicates that punishment is effective in the sense that it produces changes in behavior. The dynamics are complex, as the previous papers indicate. Some specific points will be mentioned later in this discussion.

5. Corporal punishment in the form of paddling or spanking may be used by some special educators, but articles advocating its use do not appear in the professional literature. However, the use of other punishing and aversive procedures are described in detail and their use for modifying certain behavior is strongly advocated by some.

6. Prior parental consent in writing to the use of punishment as part of a special education program is clearly required in states accepting the provisions of Public Law 94-142, if not already required by state and local regulation. In some school districts, parents must be informed, if possible,

before its use on specific occasions. The right of parents to withdraw consent at any time is recognized. Prior consent by the student is not required.

7. Improper or rash use of corporal punishment by educators has exposed them to public criticism, civil liability for damage, criminal action, and reprimands by superiors. While the courts continue to uphold the common law *in loco parentis* doctrine as applied to educators, recent decisions have circumscribed more narrowly the authority stemming from this doctrine, particularly where punishment is involved.

POINTS TO BE CONSIDERED BEFORE USING PUNISHING AND AVERSIVE PROCEDURES

1. All reasonable positive alternatives should have been considered, if not actually tried, before decision is made to use an aversive procedure. Documentation of this exploration of alternatives is desirable.

2. Thorough knowledge of state and local regulation of the use of punishment and aversives should be sought. In addition, knowledge of recent local court actions and general public opinion is desirable. If there are state regulations that apply to non-educational agencies, for example, institutions supervised by the department of welfare, information about the standards they apply would be helpful in defining defensible practice for the schools.

3. Educators should be public about their intent to use punishing procedures and maintain careful records on the decision process followed as well as frequency of use, nature, and results. Discussion and criticism should be invited prior to use.

4. The line of authority and responsibility for decisions about the use of punishment must be clear and a plan for continuing supervision and advice on policy by a committee of qualified persons, including an independent child advocate should be implemented. Specific dates should be set for review of case material. As a further safeguard against abuse, the review should require that those planning the use of aversive procedures occasionally experience them themselves at a level of intensity similar to that being used in the program.

5. Be certain that all staff who will be using punishing procedures or observing their use understand the complex dynamics of punishment situations. Some important factors which have been more thoroughly discussed in the papers are:

   a. Certain student characteristics, mostly associated with low social status and antisocial, "acting out" behavior, put students having them more "at risk" of punishment than their classmates. Punishers should be on guard against any tendency to punish such students too quickly or severely.

   b. Individual continuums of aversiveness exist for any given set of punishing procedures. The reactions of the punished persons are the test, not those of the punisher.

   c. Punishing or aversive procedures must be adjusted to the characteristics of the individual student such as age, temperament, physical strength

and sensitivity to pain, as well as to the nature of the behavior the punisher wishes to suppress.

d. The effectiveness of punishment is greatly influenced by its timing. Delayed punishment will probably not be useful with cognitively less mature persons.

e. Punishment suppresses behavior but, except in rare instances where it is employed as a negative reinforcer, it cannot be used to teach desired behavior. Considered as a negative reinforcer, its most common effects are increases in the frequency of high strength avoidance and escape behavior. Thus, other means and reinforcers must be sought to strengthen the behavior with which the punished behavior is to be replaced. Punishing students does not teach them to be good!

f. Punishment is effective because it is a powerful unconditioned reinforcer. Thus, it has a general suppressing effect on the behavior of the person punished, possibly weakening temporally contingent behavior that may be desirable as well as the target behavior. Also, previously neutral or positive characteristics of the punisher or the situation in which punishment is administered may become associated with the aversive experience by the person punished. The latter fact makes it possible to associate a mild aversive with a strong aversive, and thereby, minimize use of the latter. On the other hand the suppressing effect often fails to generalize to situations other than that where the punishment is applied. For full effectiveness, multiple applications may be necessary.

g. To punish is often arousing for the punishers, and the effects of punishment on behavior the punisher finds aversive may reinforce its use. The punished person and others may observe that the punisher appears to obtain rewards through punishing behavior. This increases the likelihood that they will imitate the punishing behavior when the opportunity presents itself. Punishment should take place in private rather than in front of the punished person's peers because of the arousing and modeling effects mentioned. Adult witnesses should be present with authority to intervene if the punishment becomes abuse as well as to corroborate data on use.

h. Using a procedure which is manifestly more severe in its effects on the punished student than those of the disapproved behavior on himself or herself, or on other persons, is indefensible. Firm limits should be set on frequency and intensity in advance of any application.

6. The environment must be safe for the use of the punishing procedures employed. Persons experienced in the use of the particular procedures to be used should survey the environment for possible hazards prior to implementation of a punishment program.

7. Public discussion of punishment as one part of an educational or treatment program should be encouraged. When state and institutional guidelines do not exist, it is in the interest of those who use aversive procedures as well as those to whom they are applied to see that they are developed.

A FINAL COMMENT:

Punishment and aversive procedures continue to have a place, albeit a very narrow place, in special education programs for severely emotionally disturbed and behaviorally disordered students. Since punishment primar-

ily suppresses behavior and the behavior that it often reinforces secondarily is escaping and avoiding rather than positive in nature, it will always be the intervention of necessity rather than choice for the educator. Punishment for purposes of retribution or revenge has no place in special educational programs. The chief justifications for its use must be that the behavior it suppresses is more injurious to the person punished or to persons in his or her environment than the punishment applied, and that no other reasonable alternative intervention remains. This justification will be strengthened when the total program includes provision for teaching approved behavior to replace that being punished.

Using punishment should be a painful experience for the punisher as well as the punished. When our rationalizations come too easily and we cease to be sensitive about the infliction of pain on others, or even worse, begin to find satisfaction in punishing, we have lost some of our own humanity.

Speaking of the archetypal punishers, someone wisely noted, "In Hell, even the devils are damned." Let us take care that we do not join their company.

Conference Participants

Steven R. Forness

B.A. 1963 (English/Education) University of Northern Colorado; M.A. 1964 (Educational Psychology) University of Northern Colorado; Ed.D. 1968 (Special Education) University of California at Los Angeles (UCLA).

Dr. Forness is presently the Principal of the Neuropsychiatric Institute School at UCLA. He is also a Professor of Mental Retardation and Child Psychiatry at UCLA and serves as an educational psychologist for the Neuropsychiatric Institute Child Outpatient Clinic. Dr. Forness formerly taught high school English for the learning handicapped in California.

Frank M. Hewett

B.A. 1951 (Theatre Arts) University of California at Los Angeles (UCLA); M.A. 1958 (Clinical Psychology) UCLA; Ph.D. 1961 (Clinical Psychology) UCLA.

Dr. Hewett is presently a Professor of Education and Psychiatry and Head of the specialization in special education at UCLA. He formerly was a teacher and teacher supervisor at the Fernald School at UCLA and founded and served as Principal of the Neuropsychiatric Institute School at that same institution.

K. Charlie Lakin

B.A. 1970 (Sociology) University of Northern Iowa; M.A. 1975 (Special Education), M.Ed. 1975 (Learning Disabilities and Remedial Reading) Teachers College, Columbia University.

Mr. Lakin presently assists the Director of the Advanced Institute for Trainers of Teachers for Seriously Emotionally Disturbed Children and Youth and is a student at the University of Minnesota. He has taught children with learning and adjustment problems in New York City and in Arizona.

Richard S. Neel

B.A. 1964 (Economics) University of California at Los Angeles; M.A. 1971 (Special Education) University of Southern California (USC); Ph.D. 1972 (Special Education) USC.

Dr. Neel is presently an Associate Professor of Special Education at the University of Washington where is involved in research on social learning among children with learning and adjustment problems. Dr. Neel formerly taught in regular junior high school classes and in special classes for children with learning and adjustment problems.

Robert B. Rutherford, Jr.

B.S. 1965 (Education) University of Virginia; M.Ed. 1966 (Special Education) University of Virginia; Ed.S. 1968 (Special Education Administration) George Peabody College for Teachers; Ph.D. 1971 (Special Education) George Peabody College for Teachers.

Dr. Rutherford is presently an Associate Professor in the Department of Special Education at Arizona State University. He was formerly on the faculty of the

Department of Special Education at the University of Southern California. Dr. Rutherford also has worked as a special class teacher of children with adjustment problems.

Frank H. Wood

B.A. 1951 (American History) Harvard College; M.A. 1953 (Social and Technical Assistance to Developing Nations) Haverford College; Ph.D. 1965 (Educational Psychology) University of Minnesota.

Dr. Wood is presently a Professor in the Department of Psychoeducational Studies at the University of Minnnesota and Director of the Advanced Institute for Trainers of Teachers for Seriously Emotionally Disturbed Children and Youth. Dr. Wood formerly taught in regular elementary and high school classes as well as special classes for children with learning and adjustment problems.